The University Library

WEST VIRGINIA UNIVERSITY

BULLETIN

THE CATALOGUE NUMBER

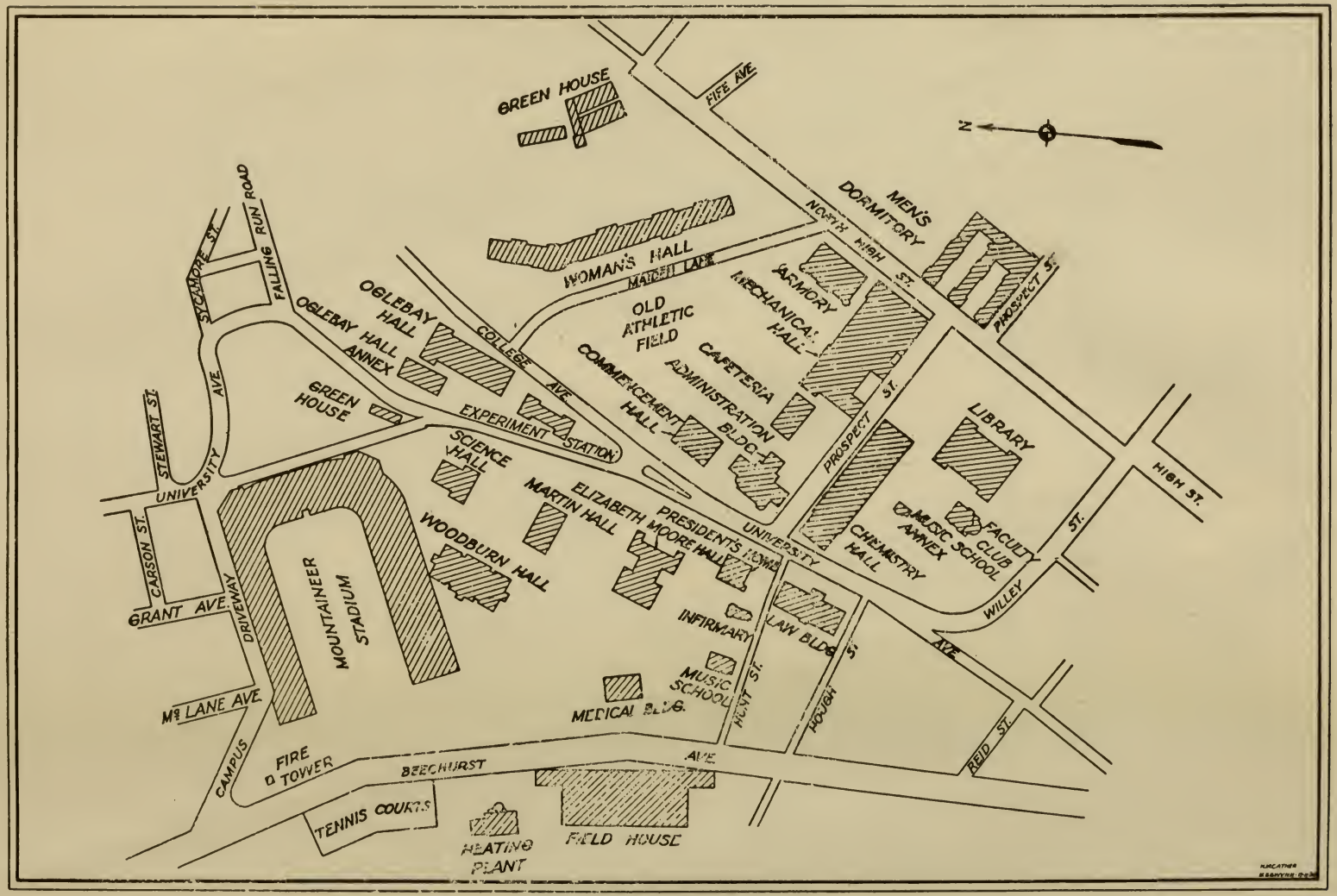
The 1940-41 Session

ANNOUNCEMENTS OF THE 1941-42 SESSION

May, 1941

MORGANTOWN, WEST VIRGINIA

Published by the University



MAP OF THE CAMPUS

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Year 1941

JANUARY

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Year 1942

JANUARY

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NOVEMBER

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DECEMBER

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13	14	15	16	17	18	1
20	21	22	23	24	25	2
27	28	29	30	31		

The days on which the University is in session are printed in light-face type; Sundays, holidays, and vacations in bold face type.

The University Calendar

1941

May 28, Wednesday, to June 5, Thursday, inclusive
Final examinations for second semester
May 30, Friday ---------- Memorial Day, a holiday
June 5, Thursday ---------- Baccalaureate exercises
June 6, Friday ---------- Alumni Day
June 7, Saturday ---------- Commencement Day
June 11, Wednesday ---------- Registration for first term, Summer Session
June 12, Thursday ---------- First recitations of Summer Session
July 4, Friday ---------- Independence Day, a holiday
July 22, Tuesday ---------- Close of first term, Summer Session
July 23, Wednesday ---------- Registration for second term, Summer Session
July 24, Thursday ---------- First recitations of second term, Summer Session
August 26, Tuesday ---------- Close of Summer Session
September 12, Friday, to September 17, Wednesday, inclusive, Freshman Week
September 16 and 17, Tuesday and Wednesday ---Registration for first semester
September 18, Thursday ---------- First recitations of first semester
November 20, Thursday, to November 23, Sunday, inclusive, Thanksgiving recess
November 24, Monday ---------- Mid-semester reports due
December 21, Sunday, to January 4, Sunday, inclusive ---------- Christmas recess

1942

January 24, Saturday, to January 31, Saturday, inclusive
Final examinations for first semester
February 3 and 4, Tuesday and Wednesday ---Registration for second semester
February 5, Thursday ---------- First recitations of second semester
April 2, Thursday, to April 7, Tuesday, inclusive ---------- Easter recess
April 8, Wednesday ---------- Mid-semester reports due
May 27, Wednesday, to June 5, Friday, inclusive
Final examinations for second semester
May 30, Saturday ---------- Memorial Day, a holiday
June 6, Saturday ---------- Alumni Day
June 7, Sunday ---------- Baccalaureate exercises
June 8, Monday ---------- Commencement Day
June 10, Wednesday ---------- Registration for first term, Summer Session
June 11, Thursday ---------- First recitations, Summer Session
July 4, Saturday ---------- Independence Day, a holiday
July 21, Tuesday ---------- Close of first term, Summer Session
July 22, Wednesday ---------- Registration for second term, Summer Session
July 23, Thursday ---------- First recitations of second term, Summer Session
September 1, Tuesday ---------- Close of Summer Session

Incorrect - See catalogue for 42-43.

West Virginia University

Morgantown

Established February 7, 1867

The West Virginia Board of Control

	TERM EXPIRES
WALTER R. THURMOND, PRESIDENT, *Logan*	June 30, 1941
JOHN BAKER WHITE, SECRETARY, *Charleston*	June 30, 1943
MERRILL D. CARRICO, TREASURER, *Terra Alta*	June 30, 1945

The West Virginia Board of Control has the direction of the financial and business affairs of the state educational institutions.

The Board of Governors

	TERM EXPIRES
ARTHUR BURKE KOONTZ, PRESIDENT, *Charleston*	June 30, 1940
WRIGHT HUGUS, VICE-PRESIDENT, *Wheeling*	June 30, 1942
HARRIET LOUISE FRENCH, *Bluefield*	June 30, 1941
JOHN JACOB CORNWELL, *Romney*	June 30, 1941
JOHN ROBERT POLAND, *Martinsburg*	June 30, 1940
JOHN DEMPSEY HOBLITZELL, Jr., *Parkersburg*	June 30, 1941
ROBERT HOWARD PRITCHARD, *Weston*	June 30, 1942
CHARLES THOMPSON NEFF, Jr., SECRETARY, *Morgantown*	

The Board of Governors has charge of the educational and administrative affairs of the University.

MORGANTOWN PRINTING & BINDING COMPANY

Part II

The Staff of Instruction, Research, and Extension*

THE ADMINISTRATIVE OFFICERS

General

CHARLES ELMER LAWALL, E. M., M. S., LL. D., *President of the University* (1939), 1921.

LONNA DENNIS ARNETT, PH. D., *Librarian Emeritus* (1935), 1910.

EDNA ARNOLD, M. A., *Dean of Women* (1939), 1935.

RICHARD ASPINALL, D. B., PH. D., *Assistant to the President, Director of Student Affairs, and Director of University Extension* (1936), 1930.

LLOYD LOWNDES FRIEND, M. A., *Registrar of the University* (1929), 1925.

WILLIAM PORTER KELLAM, A. M., *Librarian* (1939).

CHARLES THOMPSON NEFF, JR., A. B., *Financial Secretary* (1934), 1927.

The Colleges, Schools, and Divisions

FRIEND EBENEZER CLARK, PH. D., *Chairman of the Graduate Council* (1935), 1914.

FRANK CUTHBERT, MUS. D., *Director of the School of Music* (1934).

ANDREW JACKSON DADISMAN, PH. D., *Director of the Summer Session* (1929), 1914.

ROLAND PARKER DAVIS, PH. D.. *Dean of the College of Engineering* (1932), 1911.

CARL MAYNARD FRASURE, PH. D., *Assistant Dean of the College of Arts and Sciences* (1936), 1927.

THOMAS PORTER HARDMAN, J. D., *Dean of the College of Law* (1931), 1913.

JOSEPH LESTER HAYMAN, PH. C., M. S., *Dean of the College of Pharmacy* (1938), 1919.

EARL HUDELSON, PH. D., *Dean of the College of Education* (1930), 1920.

JOHN OLIVER KNAPP, B. S. Agr., *Director, Agricultural Extension Division* (1938), 1917.

DENNIS LEE MCELROY, B. S. E. M., M. S., *Director of the School of Mines and Director of Extension in the Industrial Sciences* (1939), 1928.

CLAYTON ROBERTS ORTON, PH. D., *Dean of the College of Agriculture, Forestry, and Home Economics, and Director of the Agricultural Experiment Station* (1938), 1929.

WILLIAM R. ORTON, B. S., *Lieutenant Colonel, Infantry, U. S. Army, Commandant of Cadets* (1939).

*NOTE: Date of appointment to present position is given in parentheses after title; date following, if any, indicates year of first appointment to a University staff position.

PERLEY ISAAC REED, PH. D., *Director of the School of Journalism* (1939), 1920.

WILSON PORTER SHORTRIDGE, PH. D., *Dean of the College of Arts and Sciences* (1929), 1922.

ALDEN WILBUR THOMPSON, M. A., *Dean of the School of Physical Education and Athletics* (1937).

EDWARD JERALD VAN LIERE, M. D., PH. D., *Dean of the School of Medicine* (1937), 1921.

The Council of Administration; The Senate

For a description of the Council of Administration and of the University Senate see the section on Government and Organization, page 30.

The Graduate Council

FRIEND EBENEZER CLARK, PH. D., (*Chairman*), *Professor of Chemistry.*

CHARLES HENRY AMBLER, PH. D., *Professor of History.*

ROBERT CAMERON COLWELL, PH. D., *Professor of Physics.*

ROBERT BARCLAY DUSTMAN, PH. D., *Professor of Agricultural Chemistry.*

WILLARD WELLINGTON HODGE, M. A., *Professor of Chemical Engineering.*

FORREST WILBUR STEMPLE, PH. D., *Professor of Education.*

HARRY GROVE WHEAT, PH. D., *Professor of Education.*

Other Administrative Officers

CHANDLER LINN BROOKS, *Assistant Superintendent of Buildings and Grounds* (limited service) (1932), 1917.

STANLEY R. FISHER, A. B., *Manager, University Book Store* (1934).

JOHN BEHNY GRUMBEIN, M. M. E., *Superintendent of Buildings and Grounds* (1932), 1903.

ROY M. HAWLEY, A. B., *Director of Intercollegiate Athletics* (1938), 1935.

DAVID W. JACOBS, A. B., *Director, Bureau of Information* (1938).

GERALD JENNY, M. S., *University Editor* (1933), 1929; *Director of University Broadcasting* (1938).

LOUISE KEENER, B. A., *Assistant Financial Secretary* (1936), 1929.

J. EVERETT LONG, A. M., *Assistant Registrar* (1935), 1929.

BERNARD R. MCGREGOR, B. S. ED., *Director of the University Band* (1937), 1935.

WALTER ALEXANDER MESTREZAT, *Director Emeritus of the University Band* (1937), 1901.

BERTHA BROWNING PURINTON, A. M., *Assistant Registrar* (1928), 1919.

HARRY EVERETT STONE, A. M., *Secretary of the Student Loans and Placement* (1936), 1922.

The Student Health Service

FREDERICK RENDELL WHITTLESEY, M. D.,[1] *University Physician and Director of the Student Health Service* (1931), 1930.

ROY ROOSEVELT SUMMERS, B. S., M. D., *University Physician and Assistant Director, Student Health Service* (1940), 1932.

SAMUEL JOHN MORRIS, M. D., *Student Health Physician and Attending Physician, Department of Athletics* (1935), 1912.
JOHN FRANKLIN STECKER, M. D., *Part-time Physician, Student Health Service* (1940).
ETHEL FEATHER, *Nurse and Receptionist* (1940), 1926.
ANNA MARIE HADDOCK, R. N., *Nurse* (1940).
MABEL M. LOVE, R. N., *Nurse* (1930).

The Residences and Commons

MAYME ELIZABETH WADDELL, B. S., M. A., *Business Director* (1935), 1930.
MRS. ELIZABETH B. ABBOTT,[2] *Night Chaperon, Woman's Hall, Center* (1935), 1919.
EDNA ARNOLD, M. A., *Social Director, Woman's Hall, North* (1935).
MRS. OLA S. COFFROTH, *Executive Housekeeper* (1936), 1935.
ANN L. CULLEY, B. S., *Dietitian, Woman's Dining Hall* (1937).
ARLEIGH LEE DARBY, LITT. D., *Faculty Resident, Men's Dormitory* (1935), 1910.
NELLE SHEPHERD FERRY, B. S., *Dietitian of Cafeteria* (1935).
CAROL GAWTHROP, A. B., M. A., *Social Director, Woman's Hall, South* (1937).
ELINOR FRANCES GIBBS, B. S., *Assistant Dietitian, Dining Halls* (1941).
ISABEL RAY HAYES, *Social Director, Woman's Hall, Center* (1935), 1923.
ANNE JOHNSTON, B. S.,[3] *Assistant Dietitian, Men's Dining Hall* (1937).
FRANCES LARAWAY, B. S.,[3] *Dietitian of Men's Dining Hall* (1936).
MRS. KATHLEEN MITCHELL, *Assistant to Social Directors, Woman's Hall* (1940).
MILDRED L. PETERSON, B. S., *Dietitian, Men's Dining Hall* (1940).
KENNETH WOOD, MUS. B., MUS. M., *Faculty Resident, Men's Dormitory* (1939), 1928.

THE STAFF OF INSTRUCTION

Professors

HOWARD BUSHNELL ALLEN, PH. D., *Professor of Education* (1932), 1920.
CHARLES HENRY AMBLER, PH. D., *Professor of History* (1929), 1917.
WALTER WARDLAW ARMENTROUT, PH. D., *Professor of Agricultural Economics* (1936), 1924.
HORACE ATWOOD, M. S. AGR., *Professor Emeritus of Poultry Husbandry* (1931), 1911.
ROBERT DODGE BALDWIN, PH. D., *Professor of Education* (1933), 1931.
GORDON ALGER BERGY, PH. C., M. S., *Professor of Pharmacy* (1917), 1916.
GEORGE PAUL BOOMSLITER, M. S. C. E., *Professor of Mechanics* (1920).
CHRISTOPHER GEORGE BROUZAS, PH. D., *Professor of Latin and Greek* (1935), 1926.
JAMES MORTON CALLAHAN, PH. D., *Professor Emeritus of History* (1940), 1902.
LEO CARLIN, A. B., LL. B., *Professor of Law* (1921), 1916.
SIMON B. CHANDLER, A. M., M. D., *Professor of Anatomy* (1935).
OLIVER PERRY CHITWOOD, PH. D., LL. D., *Professor of History* (1907).
FRIEND EBENEZER CLARK, PH. D., *Professor of Chemistry* (1914).
ARMAND RENE COLLETT, PH. D., *Professor of Chemistry* (1939), 1924.
CLYDE LEMUEL COLSON, A. B., LL. B., S. J. D., *Professor of Law* (1938), 1935.
RACHEL HARTSHORN COLWELL, M. A., *Professor Emeritus of Home Economics and Education* (1938), 1910.
ROBERT CAMERON COLWELL, PH. D., *Professor of Physics* (1924), 1918.

[2]Deceased July 1, 1940.
[3]Resigned July 1, 1940.

JOHN HARRINGTON COX, PH. D., LITT. D., *Professor of English Philology Emeritus* (1930), 1902.

FRANK CUTHBERT, MUS. D., *Professor of Music* (1934).

ANDREW JACKSON DADISMAN, PH. D., *Professor of Economics* (1933), 1914.

ARLEIGH LEE DARBY, A. M., LITT. D., *Professor of Romance Languages* (1920), 1910.

EARL CLAUDIUS HAMILTON DAVIES, PH. D., *Professor of Chemistry* (1931), 1920.

ROLAND PARKER DAVIS, PH. D., *Professor of Structural and Hydraulic Engineering* (1911).

JASPER NEWTON DEAHL, PH. D., *Professor Emeritus of Education* (1933), 1901.

EDMUND CHARLES DICKINSON, A. B., J. D., *Professor of Law* (1921).

GIDEON STANHOPE DODDS, B. A., M. A., PH. D., *Professor of Histology and Embryology* (1925), 1918.

WILLIAM SMITH DOWNS, B. S. C. E., C. E., *Professor of Railway and Highway Engineering* (part-time) (1935), 1931.

CHARLES ARTHUR DRAKE, PH. D., D. C. SC.,[1] *Director, Bureau of Instructional Research* (1938).

JOHN WILLIAM DRAPER, PH. D., *Professor of English* (1929).

ROBERT BARCLAY DUSTMAN, PH. D., *Professor of Agricultural Chemistry* (1929), 1924.

JOHN ARNDT EIESLAND, PH. D., *Professor Emeritus of Mathematics* (1938), 1907.

CLEMENT COLEMAN FENTON, M. S., M. D., *Professor of Pathology and Clinical Pathology* (1926), 1922.

ALEXANDER HARDIE FORMAN, M. M. E., PH. D., *Professor of Electrical Engineering* (1916), 1913.

CARL MAYNARD FRASURE, PH. D., *Professor of Political Science* (1940), 1927.

JAMES HERBERT GILL, M. E., *Professor Emeritus of Machine Construction and Superintendent of Shops* (1940), 1920.

JOHN BEHNY GRUMBEIN, M. M. E., *Professor of Power Engineering* (1916), 1903.

ARTHUR A. HALL, B. S. M. E., *Professor of Electrical Engineering* (1922), 1916.

THOMAS PORTER HARDMAN, M. A., J. D., *Professor of Law* (1919), 1913.

THOMAS LUTHER HARRIS, PH D., *Professor of Sociology* (1923), 1921.

LESLIE DAVID HAYES, M. E., *Professor of Machine Design and Construction* (1918).

TYLER F. HAYGOOD, PH. D., *Professor of Economics* (1939), 1938.

JOSEPH LESTER HAYMAN, PH. C., M. S., *Professor of Pharmacognosy* (1936), 1919.

HARRY ORAM HENDERSON, PH. D., *Professor of Dairy Husbandry* (1928), 1919.

HUBERT HILL, M. S., *Professor of Chemistry* (1928), 1911.

LAWRENCE BENJAMIN HILL, PH. D., *Professor of Education* (1920), 1918.

WILLARD WELLINGTON HODGE, M. A., *Professor of Chemical Engineering and Director, Engineering Experiment Station* (1936), 1921.

EARL HUDELSON, PH. D., *Professor of Education* (1920).

CARL ALFRED JACOBSON, PH. D., *Professor of Chemistry* (1920).

DAVID DALE JOHNSON, A. M., LITT. D., *Professor of English* (1920), 1902.

WALTER ALLOS KOEHLER, CH. E., PH. D., *Professor of Chemical and Ceramic Engineering and Acting Director, Engineering Experiment Station* (1938), 1924.

JULIAN GILBERT LEACH, PH. D., *Professor of Plant Pathology* (1938).

LEON H. LEONIAN, PH. D., *Professor of Mycology* (1936), 1922.

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[1]Resigned Feb. 1, 1941.

EDWARD ALEXANDER LIVESAY, D. Sc., *Professor of Animal Husbandry* (1919).
DENNIS LEE MCELROY, B. S. E. M., M. S., *Professor of Mining Engineering* (1939), 1928.
RAY STANLEY MARSH, M. A., *Professor of Horticulture* (1936).
FRED A. MOLBY, PH. D., *Professor of Physics* (1921), 1920.
SAMUEL MORRIS, PH. D., *Professor of Chemistry* (1921), 1916.
SAMUEL JOHN MORRIS, M. D., *Professor of Physical Education* (1936), 1912.
RUTH DOUGLAS NOER, M. S., *Professor of Home Economics* (1938), 1925.
WILLIAM R. ORTON, B. S., *Professor of Military Science and Tactics* (1939).
DICKSON WARD PARSONS, PH. D., *Professor of Rural Organization* (1939), 1923.
LEONARD MARION PEAIRS, PH. D., *Professor of Entomology* (1914), 1912.
W. CLEMENT PERCIVAL, PH. D., *Professor of Forestry* (1939), 1934.
GEORGE GORDON POHLMAN, PH. D., *Professor of Agronomy* (1938), 1930.
REBECCA LUELLA POLLOCK, PH. D., *Professor of Education* (1928), 1916.
PAUL HOLLAND PRICE, PH. D., *Professor of Geology* (1938), 1930.
PERLEY ISAAC REED, PH. D., *Professor of Journalism* (1927), 1920.
ALBERT MOORE REESE, PH. D., *Professor of Zoology* (1907).
CLARENCE NEWTON REYNOLDS, JR., PH. D., *Professor of Mathematics* (1931), 1921.
WILSON PORTER SHORTRIDGE, PH. D., *Professor of History* (1922).
FRED MANNING SMITH, PH. D., *Professor of English* (1939), 1927.
ROBERT CLIFTON SPANGLER, PH. D., *Professor of Botany* (1926), 1914.
CLAUDE CARL SPIKER, PH. D., *Professor of French and Spanish* (1926), 1913.
ROBB SPALDING SPRAY, PH. D., *Professor of Bacteriology and Public Hygiene* (1926), 1921.
ELIZABETH MATTINGLY STALNAKER, PH. D., *Professor of Psychology* (1928), 1925.
MADISON STATHERS, PH. D., *Professor of Romance Languages* (1910), 1906.
FORREST WILBUR STEMPLE, PH. D., *Professor of Education* (1931), 1916.
PERRY DANIEL STRAUSBAUGH, PH. D., *Professor of Botany* (1923).
EMIL MCKEE SUNLEY, PH. D., *Professor of Public Welfare* (1938).
LELAND HART TAYLOR, SC. D., *Professor of Zoology* (1939), 1922.
ALDEN WILBUR THOMPSON, M. A., *Professor of Physical Education* (1937).
BIRD MARGARET TURNER, PH. D., *Professor of Mathematics* (1931), 1923.
EDWARD JERALD VAN LIERE, M. D., PH. D., *Professor of Physiology* (1921).
ENOCH HOWARD VICKERS, A. M., *Professor Emeritus of Economics and Business Administration* (1938), 1911.
HARRY GROVE WHEAT, PH. D., *Professor of Education* (1935).
FREDERICK RENDELL WHITTLESEY, B. A., M. D.,[1] *Professor of Medicine* (1940), 1930.
CURTIS CHANDLER WILLIAMS, JR., A. B., S. J. D., *Professor of Law* (1932).
JOHN E. WINTER, PH. D., *Professor of Psychology* (1923), 1921.

Associate Professors

LOWELL BESLEY, M. F., *Associate Professor of Forest Management* (1938), 1937.
GEORGE AUGUSTUS BOWLING, M. S., *Associate Professor of Dairy Husbandry* (1938), 1931.
CARL HENRY CATHER, M. S., *Associate Professor of Mechanics* (1939), 1916.
HAROLD MALCOLM CATHER, B. S. M. E., M. E., *Associate Professor of Power Engineering* (1939), 1919.

[1]Resigned Sept. 1, 1940.

LOUIS WATSON CHAPPELL, A. M., *Associate Professor of English* (1928), 1923.

FERRIS DEWEY CORNELL, JR., PH. D., *Associate Professor of Agricultural Economics* (1937), 1921.

STEPHEN FULLER CROCKER, A. M., *Associate Professor of English* (1938), 1931.

HANNIBAL ALBERT DAVIS, PH. D., *Associate Professor of Mathematics* (1935), 1921.

KENNETH CULP DAVIS, A. B., LL. B.,[1] *Associate Professor of Law* (1938), 1935.

LILY BELL DEATRICK, PH. D., *Associate Professor of Chemistry* (1927), 1920.

GEORGE A. EMERSON, M. S., PH. D., *Associate Professor of Pharmacology* (1938), 1935.

THOMAS EDSON ENNIS, PH. D., *Associate Professor of History* (1938), 1930.

ORFA REX FORD, PH. D., *Associate Professor of Physics* (1931), 1925.

HARRY MARION FRIDLEY, PH. D., *Associate Professor of Geology* (1935), 1928.

GRACE MARGARET GRIFFIN, A. M., *Associate Professor of Physical Education and Director of the Service Program for Women* (1935), 1923.

LYDIA IRENE HINKEL, MUS. B., *Associate Professor of Music* (1939), 1921.

LLOYD MEREDITH JONES, PH. D.,[1] *Associate Professor of Physical Education and Director of the Service Program for Men* (1935), 1928.

CHARLES LESTER LAZZELL, PH. D., *Associate Professor of Chemistry* (1935), 1922.

JAMES H. C. MARTENS, PH. D., *Associate Professor of Geology* (1935), 1929.

CHARLES MITRANI, PH. D., *Associate Professor of Romance Languages* (1931), 1921.

DAVID W. NORTHUP, A. M., PH. D., *Associate Professor of Physiology* (1938), 1935.

MICHAEL ALPHONSE RAFFERTY, PH. C., M. D.,[2] *Associate Professor of Biochemistry* (1939), 1929.

JOHN HARRISON RIETZ, D. V. M., *Associate Professor of Animal Pathology* (1927).

HARRY LAWRENCE SAMUEL, M. S. in PUBLIC HEALTH, *Associate Professor of Physical Education and Director of Intramural Athletics* (1936), 1928.

BURCH H. SCHNEIDER, PH. D., *Associate Professor of Animal Husbandry* (1938).

HENRY WITHERS SPEIDEN, M. S. C. E., *Associate Professor of Civil Engineering* (1939), 1931.

WILLIAM ANDERSON STAAB, E. M., *Associate Professor of Mining Engineering* (1939). 1926.

FESTUS PAUL SUMMERS, A. M., PH. D., *Associate Professor of History* (1939), 1932.

CHARLES HENRY VEHSE, PH. D., *Associate Professor of Mathematics* (1938), 1929.

EDWIN J. WELLHAUSEN, PH. D., *Associate Professor of Agronomy* (1938).

KYLE CHESTER WESTOVER, PH. D., *Associate Professor of Horticulture* (1936), 1921.

CHARLES VINYARD WILSON, M. S., *Associate Professor of Animal Husbandry* (1938), 1919.

Assistant Professors

ALBERT SALISBURY ABEL, LL. M., *Assistant Professor of Law* (1940).

MARTIN ABRAHAM ABRAHAMSEN, M. A., *Assistant Professor of Agricultural Economics* (1936).

STEPHEN AILES, A. B., LL. B.,[1] *Assistant Professor of Law* (1937).

NELLIE PERREL AMMONS, A. M., PH. D., *Assistant Professor of Botany* (1937), 1920.

[1]Resigned Sept. 1, 1940.
[2]Resigned April 1, 1941.

ROBERT RUSSELL ASHBURN, A. M., *Assistant Professor of Spanish* (1936), 1925.

WILFRED H. BAKER, M. S. C. E., *Assistant Professor of Civil Engineering* (1941).

CARTER RICHARD BISHOP, M. A., PH. D., *Assistant Professor of English* (1937), 1929.

JAMES PAUL BRAWNER, PH. D., *Assistant Professor of English* (1936), 1935.

MAURICE GRAHAM BROOKS, M. S., *Assistant Professor of Recreational Forestry* (1938), 1934.

ORLO E. BROWN, B. S., CH. E., MET. E., *Assistant Professor of Chemical Engineering* (1938).

WILLIAM CARSON BROWN, M. S., PH. D., *Assistant Professor of Dairy Husbandry* (1939), 1934.

HAZEL CRABILL CAMERON, M. A., *Assistant Professor of Physiology and Nutrition* (1933), 1926.

JOSEPH LINCOLN CARTLEDGE, PH. D., *Assistant Professor of Agronomy* (1936).

WILLIAM HENRY CHILDS, PH. D., *Assistant Professor of Horticulture* (1940), 1931.

JULIUS COHEN, A. B., M. A., LL. B., LL. M.,[2] *Assistant Professor of Political Science* (1939), 1935.

GEORGE HENRY COLEBANK, M. A., *Assistant Professor of Education* (1928).

HENRY B. COOLEY, LL. B., C. E., M. B. A., *Assistant Professor of Economics and Business Administration* (1937).

EARL LEMLEY CORE, PH. D., *Assistant Professor of Botany* (1934), 1928.

JOHN REGINALD CRESSWELL, PH. D., *Assistant Professor of Philosophy* (1929).

QUIN FISCHER CURTIS, PH. D., *Assistant Professor of Psychology* (1941).

EUGENE DEANGELIS, B. S., M. B., M. D., *Assistant Professor of Pathology* (1939).

FRANCES PRISCILLA DELANCY, A. B., A. M., PH. D., *Assistant Professor of Political Science* (1939), 1932.

HARVEY D. ERICKSON, PH. D., *Assistant Professor of Forest Utilization* (1937).

MARJA STEADMAN FEAR, A. M., *Assistant Professor of Public Speaking* (1935), 1920.

ALBERT WILEY FRIEND, B. S. E. E., M. S.,[2] *Assistant Professor of Physics* (1937), 1934.

MALCOLM CURTIS GAAR, B. S., M. S.,[2] *Assistant Professor of Rural Organization* (1938).

CLIFFORD E. GARWICK, M. A.,[3] *Assistant Professor of Poltical Science* (1936).

FREDERICK LINCK GEILER, B. S. PHAR., M. S., *Assistant Professor of Pharmacy* (1937), 1928.

JOHN ARTHUR GIBSON, JR., PH. D., *Assistant Professor of Chemistry* (1934), 1926.

MELVIN CRAWFORD GODWIN, A. B., PH. D., *Assistant Professor of Anatomy and Histology* (1940), 1936.

LLOYD RAYMOND GRIBBLE, PH. D., *Assistant Professor of Zoology* (1935), 1929.

GEORGE WALTER GROW, M. S., *Assistant Professor of Drawing and Machine Design* (1917), 1912.

MAURICE COFFYN HOLMES, SC. D., *Assistant Professor of Physics* (1930), 1927.

TORKEL HOLSOE, M. F., *Assistant Professor of Silviculture* (1938).

BEATRICE HURST, M. A., *Assistant Professor of Physical Education* (1935), 1928.

EDWIN CHANNING JONES, M. S. E. E., *Assistant Professor of Electrical Engineering* (1935), 1926.

[2]On leave, 1940-41.
[3]Resigned May 1, 1940.

PAUL HOMER KEISTER, B. S. M. E., S. M. in A. E., *Assistant Professor of Aeronautical Engineering* (1939).

FORREST ELWOOD KELLER, M. A., *Assistant Professor of Economics* (1936).

JOHN JOSEPH LAWLESS, B. S., M. A., PH. D.,[4] *Assistant Professor of Anatomy* (1935).

STANTON CLOWES DAVISON LAWSON, B. A. SC., M. S., *Assistant Professor of Mechanics* (1939), 1937.

JAMES B. LOWTHER, M. A., *Assistant Professor of Public Speaking* (1935), 1931.

JOHN BECKER LUCKE, PH. D.,[4] *Assistant Professor of Geology* (1936).

MARLYN EDWARD LUGAR, A. B., LL. B., *Assistant Professor of Law* (1939).

PERCIVAL LLOYD MACLACHLAN, PH. D., *Assistant Professor of Biochemistry* (1938), 1936.

WARREN FRANCIS MANNING, A. M., *Assistant Professor of French* (1938), 1928.

ELDOR A. MARTEN, PH. D., *Assistant Professor of Bacteriology* (1939), 1936.

GEORGE RALPH MAXWELL, B. S., M. D., *Assistant Professor of Physical Diagnosis* (1936), 1924.

H. BOONE MICHELSON, M. S. in J., *Assistant Professor of Journalism* (1939), 1935.

ROY EZEKIEL NELSON, M. S. C. E., M. S. HIGHWAY ENG'G.,[5] *Assistant Professor of Railway and Highway Engineering* (1925), 1921.

NELL NESBITT, A. M., *Assistant Professor of Home Economics* (1923).

BETH MAE PALMER, M. S., *Assistant Professor of Home Economics* (1927).

CHARLES EDWIN PATTON, A. M., *Assistant Professor of Art* (1939).

CECIL BENJAMIN PRIDE, A. B., M. D., *Assistant Professor of Surgery* (1936), 1926.

GEORGE RAYMOND RINEHART, M. A.,[4] *Assistant Professor of Journalism* (1936), 1931.

IRA ERRETT RODGERS, A. B., *Assistant Professor of Physical Education* (1931), 1920.

LYDIA ROESCH, PH. D., *Assistant Professor of German* (1935), 1925.

JACOB SAPOSNEKOW, A. M., *Assistant Professor of Sociology* (1924).

HARVEY SHELTON, B. S., LIEUTENANT COLONEL, INFANTRY, U. S. ARMY, *Assistant Professor of Military Science and Tactics* (1938).

VOLNEY WILLIAM SHEPARD, A. B., B. M., *Assistant Professor of Music* (1930), 1927.

HOWARD PERRY SIMONS, B. A., M. S., *Assistant Professor of Chemical Engineering* (1939).

ARTHUR NEWELL SMITH, A. B., *Assistant Professor of Physical Education* (1931), 1923.

JOSEPH K. STEWART, PH. D., *Assistant Professor of Mathematics* (1939), 1930.

ROY ROOSEVELT SUMMERS, B. S., M. D., *Assistant Professor of Physical Diagnosis* (1936), 1932.

CHARLES DANSER THOMAS, M. S., PH. D., *Assistant Professor of Physics* (1939), 1931.

EDWARD HENRY TYNER, PH. D., *Assistant Professor of Agronomy* (1938).

RANDOLPH WYATT WEBSTER, PH. D., *Assistant Professor of Physical Education and Director of Service Program for Men* (1940).

DANA WELLS, M. A., *Assistant Professor of Geology* (1938), 1930.

HAROLD WENTWORTH, PH. D., *Assistant Professor of English* (1939), 1934.

BENNETT SEXTON WHITE, B. S. M. E., *Assistant Professor of Drawing and Machine Design* (1922), 1919.

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[4]Resigned Sept. 1, 1940.
[5]Deceased Jan. 7, 1941.

ERNEST THOMAS WIGHTMAN, M. S. AGR., *Assistant Professor of Poultry Husbandry* (1934), 1924.

RAYMOND WESLEY WILD, PH. M., *Assistant Professor of Journalism* (1940).

MAYBIN H. WILSON, B. E. in C. E., *Major, Corps of Engineers, U. S. Army, Assistant Professor of Military Science and Tactics* (1936).

KENNETH WOOD, MUS. B., MUS. M., *Assistant Professor of Violin and Ensemble* (1931), 1928.

Instructors

CLAUDE D. BALDWIN, PH. D., *Instructor in Economics* (1940).

EUGENE PAUL BRASHER, M. S.,[1] *Instructor in Horticulture* (1936).

WALTER MARION BROADFOOT, M. S., *Instructor in Agronomy* (1938), 1936.

MARION LYNN BUCHANAN, M. S.,[2] *Instructor in Animal Husbandry* (1937), 1935.

ANTHONY VANDRIL CADDEN, B. S., M. D., *Instructor in Medicine* (Hopemont) (1936).

WILLIAM JOHN CARL, *Instructor in Foundry Practice and Pipe Fitting* (1920).

GENEVIEVE BERNICE CLULO, A. M., *Instructor in Plant Pathology* (1934), 1932.

MARGARET BUCHANAN COLE, A. B., *Instructor in Mathematics* (1938).

WILLIAM HOWARD CONKLE, M. S., *Instructor in Horticulture* (1941).

KERMIT A. COOK, M. A., *Instructor in Education* (1935).

LUCY MAY COPLIN, A. M., *Instructor in Education* (1931), 1925.

EDWARD HERMAN CUBBON, M. A., *Instructor in Education* (1936), 1933.

MONTELLE DIETRICH, M. S., *Instructor in Home Economics* (1929).

ROBERT TUCKER DONLEY, A. B., LL. B., *Instructor* (part-time) *in Law* (1941).

WILLIAM HENRY DUIS, M. S., *Instructor in Horticulture* (1938), 1937.

ARTHUR PINGREE DYE, M. S. AGR., *Instructor in Horticulture* (1930), 1923.

JASON CLARK EASTON, PH. D., *Instructor in History* (1938).

ROY EUGENE EMERSON, B. S. AGR., *Instructor in Rural Organization* (1940).

MARGARET ERLANGER, M. A., M. S., *Instructor in Physical Education* (1937).

GEORGE ANDREW FEDERER, JR., M. A., *Instructor in Education* (1934), 1928.

NELL SHEPHERD FERRY, B. S. H. E., *Instructor in Home Economics* (1935).

MARGARET G. FOX, M. A., *Instructor in Physical Education* (1940).

ROBERT JAMES HASSETT, B. S. M. E., *Instructor in Mechanical Engineering* (1939).

LAURENCE S. HENSLEY, B. S. C. E., *Instructor in Civil Engineering* (1941).

WILLIAM FRANCIS HEWITT, JR., S. M.,[3] *Instructor in Physiology* (1939).

CHARLES W. HILL, M. A., *Instructor in Rural Organization* (1941).

CARL E. JOHNSON, M. D., *Instructor* (part-time) *in Medicine* (1941).

ROBERT H. JOHNSON, PH. D., *Instructor in Economics and Business Administration* (1940).

LLOYD EVERETT JONES, *Instructor in Machine Design and Construction* (1937).

WILLIAM FRANKLIN KERN, A. B., *Instructor in Physical Education* (1940).

FRANK W. KUTZ, B. S. ED., *Instructor in Physical Education* (1940).

VICTOR JACOB LEMKE, B. A., M. A., PH. D., *Instructor in German* (1939).

ALFRED DELBERT LONGHOUSE, M. S. AGR.,[2] *Instructor in Rural Organization* (1938).

ARTHUR COOK MCBRIDE, A. B., *Instructor in French* (1934), 1927.

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[1]Resigned Feb. 1, 1941.
[2]On leave, 1940-41.
[3]Resigned Sept. 1, 1940.

ELIZABETH MCBROOM, M. A., *Instructor in Public Welfare* (1939).
BEATRICE THOMAS MCCUE, B. S.,[3] *Instructor in Physical Education* (1928).
BERNARD R. MCGREGOR, B. S. ED., *Instructor in Music* (1936), 1935.
VIRGINIA CHRISMAN MCWHORTER, *Instructor in Music* (1940), 1935.
LOUIS JOHN MANUS, M. S., *Instructor in Dairy Husbandry* (1936), 1932.
C. ARNOLD MATTHEWS, B. S. COM., M. A.,[3] *Instructor in Economics* (1939).
GLENN FAYETTE MARTIN, *Instructor in Machine Shop and Welding Practice* (1940).
VORAS D. MEEKS, M. S., *Instructor in Public Speaking* (1938).
SUSAN MAXWELL MOORE, A. B., *Instructor Emeritus in Piano and Sight Playing* (1937), 1903.
JAMES MORRISON, M. S., *Instructor in Pharmacology* (1940).
MARY NADINE PAGE, M. A., *Instructor in English* (1934), 1925.
JAMES LOWELL PARSONS, B. S. M. E., *Instructor* (part-time) *in Mechanical Engineering* (1939).
HELEN PURINTON PETTIGREW, PH. D., *Instructor in English* (1924), 1919.
GEORGE LEWIS PHILLIPS, M. A., PH. D.,[4] *Instructor in English* (1937).
JAMES STANLEY POUNDSTONE, *Instructor in Mining Extension* (1924).
DEXTER NEVINS PUTNAM, M. S., *Instructor in Dairy Husbandry* (1940), 1938.
RICHARD A. RAESE, A. B., *Varsity Basketball Coach* (1938).
ELIZABETH FROST REED, A. M., *Instructor in English* (1919).
DONALD DIRK RITCHIE, A. B., B. S., M. S., *Instructor in Biology* (1938).
EVAN OWEN ROBERTS, B. A., M. A.,[3] *Instructor in Business Administration* (1939).
TOM DOYLE RUNNELS, M. S., *Instructor in Poultry Husbandry* (1940), 1938.
DAVID SALKIN, M. D., *Instructor in Medicine* (Hopemont) 1936.
GREEK SAYRE, A. M., *Instructor in English* (1922), 1918.
MELVIN SCHADEWALD, M. S., *Instructor in Anatomy* (1940).
BRADLEY TITUS SCHEER, PH. D., *Instructor in Zoology* (1940).
RAYMER EGBERT SEAMAN, *Instructor in Woodworking and Foundry Practice* (1935), 1912.
CHARLES BORUM SEIBERT, M. S. E. E., *Instructor in Electrical Engineering* (1934).
GRACE MARTIN-SNEE, B. M., *Instructor in Piano and Pipe Organ* (1901), 1898.
SYLVIA JOSEPHINE SOUPART, M. A., *Instructor in Education* (1931), 1925.
ALFRED REEVES STANLEY, M. S., PH. D., *Instructor in Bacteriology* (1935), 1930.
JOHN CLIFFORD STICKNEY, PH. D., *Instructor in Physiology* (1940).
HOBART E. STOCKING, M. A., *Instructor in Geology* (1940).
WILLIAM J. THOMPSON, B. S. C. E.,[3] *Instructor in Civil Engineering* (1939), 1937.
ALICE BEIL VANLANDINGHAM, B. S. P. E.,[3] *Instructor* (part-time) *in Physical Education and Athletics* (1939).
MARVIN LEWIS VEST, M. S., *Instructor in Mathematics* (1938), 1931.
GLADYS WASMUTH, M. S., *Instructor in Home Economics* (1938).
ROLAND OSCAR WEIBEL, M. S., *Instructor in Agronomy* (1938).
RUFUS ASA WEST, *Instructor in Metal-working* (Limited Service) (1933), 1892.
RALPH H. WHERRY, M. A., *Instructor in Economics and Business Administration* (1940).

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[3]Resigned Sept. 1, 1940.
[4]Resigned June 1, 1940.

John Edward White, B. S. E. E., *Instructor in Electrical Engineering* (1939).
Nell White, M. S., *Instructor in Home Economics and Education and Assistant Teacher Trainer* (1935).
May Landstreet Wilt, M. A., *Instructor in Education* (1931), 1924.
Virgil B. Zimmermann, M. A., *Instructor in Political Science* (1941).

Lecturers

Fred Arthur Davis, B. S. C. E., *Special Lecturer in Highway Engineering* (1929).
John Nathan Simpson, A. B., M. D., *Lecturer in History of Medicine and Dean Emeritus, School of Medicine* (1935), 1902.
Eldon Bryant Tucker, M. D., *Lecturer in Anesthesiology* (1937).

Assistants and Technicians

Marvin Owens Akins, B. S., *Graduate Assistant in Animal Husbandry* (1940).
Raymond Edwin Anderson, B. S., *Graduate Assistant in Botany and Zoology* (1940).
Virginia Catherine Armstrong, B. S. Agr., *Laboratory Technician in Entomology* (1939).
Henry Dilgardt Arnett, M. S., *Graduate Assistant in Physics* (1939).
Byron N. Baer, M. S., *Graduate Assistant in Chemistry* (1937).
John Edward Bailey, B. S. E. E., *Teaching Fellow in Physics* (1941).
Ford Battles, A. M., *Teaching Fellow in English* (1940).
Frank Heaton Bell, B. S., *Graduate Assistant in Botany and Zoology* (1940).
Herald Durward Bennett, A. B., *Graduate Assistant in Botany and Zoology* (1940).
Charles Franklin Bishop, A. B., *Graduate Assistant in Plant Pathology* (1940).
Leonie Young Black, A. B., *Graduate Assistant in English* (1940).
Robert Howell Black, B. S., *Graduate Assistant in Animal Husbandry* (1940).
William Franklin Boldridge, B. S., *Graduate Assistant in Chemistry* (1939).
Laura Brilliantine, A. B., *Graduate Assistant in Botany and Zoology* (1940).
Charles E. Britton, B. S., *Graduate Assistant in Chemistry* (1940).
Grover Preston Burns, A. B., *Graduate Assistant in Mathematics* (1940).
Robert Leon Carroll, M. S., *Graduate Assistant in Physics* (1940).
Louis D. Corson, A. B., *Graduate Assistant in History* (1940).
Mildred Leona Cox, A. B., *Graduate Assistant in Education* (1940).
Robert H. Darby, A. M., *Teaching Fellow in English* (1939).
Arthur D. deVries, A. B., *Graduate Assistant in Chemistry* (1940).
Ruth Eaton, A. B., *Graduate Assistant in Physical Education* (1941).
George Flowers, A. B., *Graduate Assistant in Social Science* (1940).
Harley F. Hardman, A. B., *Graduate Assistant in Chemistry* (1940).
Fabry Livingston Hawk, M. T., *Technologist, School of Medicine* (1935), 1933.
Blaker Herod, M. A., *Teaching Fellow in Public Speaking* (1939).
William Barnes Hoskins, Mus. B., *Assistant in Music* (1940).
William Milton Hutchinson, M. S., *Graduate Assistant in Chemistry* (1937).
Thomas Harold John, A. B., *Graduate Assistant in Botany and Zoology* (1940).
Philip Edward Kennedy, A. M., *Teaching Fellow in English* (1940).
Norma Luceil King, B. S., *Teaching Fellow in Mathematics* (1940).
Alfred P. Koch, M. S., *Teaching Fellow in Economics and Business Administration* (1941).

EDITH L. LAWRENCE, A. B., *Graduate Assistant in Chemistry* (1939).
ELIZABETH LANE LEITH, A. B., *Graduate Assistant in English* (1940).
REID HAYWOOD LEONARD, B. S. AGR., *Graduate Assistant in Agricultural Chemistry* (1940).
AILON BUFORD LINGAR, A. B., *Technician, Student Health Service* (1939).
LUCIELLE LISTON, A. B., *Graduate Assistant in Education* (1941).
LOUIS LOFIEGO, B. S. CH. E., *Graduate Assistant in Chemical Engineering* (1939).
ABRAHAM STANLEY MARGOLIN, M. S., *Graduate Assistant in Plant Pathology* (1938), 1934.
CLEO OTIS MARSH, B. S. E. E., *Graduate Assistant in Physics* (1939).
SUZANNE MAURY, A. B., *Graduate Assistant in Plant Pathology* (1940).
JOHN RICHARD MULLIN, B. S., *Graduate Assistant in Plant Pathology* (1939).
KENNETH HOLDEN MURPHY, M. S., *Teaching Fellow in Mathematics* (1939).
JAMES CHRISTOPHER MYERS, A. B., *Graduate Assistant in Botany and Zoology* (1940).
HARRY E. PERSINGER, B. S., *Graduate Assistant in Chemistry* (1940).
MARY ELLEN PHILLIPS, A. B., *Graduate Assistant in Botany and Zoology* (1940).
LAURENCE G. REED, A. B., *Graduate Assistant in Chemistry* (1940).
AARON ROSE, B. S. CH. E., *Graduate Assistant in Chemical Engineering* (1940).
HELEN MILLER ROSE, A. B., MUS. B., *Assistant in Music* (1940).
WILLIAM ROBERT ROSS, A. M., *Teaching Fellow in Political Science* (1940), 1938.
CHARLES MICHAEL RUNNER, *Stationary Engineer* (1919).
JOHN LEROY SCHRODER, B. S. E. M., *Graduate Assistant in School of Mines* (1939).
THOMAS REED SCOLLON, B. S. FUEL TECH., *Research Fellow in School of Mines* (1938).
ROBERT EDWARD SHEARER, A. B., *Technician, School of Medicine* (1940).
EDGAR SIEGRIST, A. B., *Graduate Assistant in Political Science* (1940).
ARMAND EDWARDS SINGER, M. A., *Teaching Fellow in Romance Languages* (1940).
GLADYS HASTINGS SPANGLER, A. B., *Graduate Assistant in English* (1940).
CHARLES STEENBERGEN, B. S., *Graduate Assistant in Chemistry* (1940).
IRA A. STINE, JR., A. B., *Graduate Assistant in Chemistry* (1940).
RUSSELL STONER, B. S. P. E., *Graduate Assistant in Physical Education* (1940).
FRED R. TOOTHMAN, B. S. E. M., *Graduate Assistant in Mining Engineering* (1941).
HAVEN D. UMSTOTT, M. A.,[1] *Teaching Fellow in Economics and Business Administration* (1940).
ROBERT VONBERG, B. S. CH. E., *Graduate Assistant in Chemistry* (1940).
ERNEST WALLS, *Laboratory Assistant, College of Engineering* (1940).
BERNARD K. WASSERKRUG, A. B., *Graduate Assistant in Chemistry* (1941).
JAMES M. WELLS, A. M., *Teaching Fellow in English* (1939).
KENNETH DONLEY WILLIS, A. B., *Technician, School of Medicine* (1938).
WILLIAM GERALD WOLFE, A. B., *Teaching Fellow in Public Speaking* (1940).

[1]Resigned Feb. 1, 1941.

THE UNIVERSITY DEMONSTRATION HIGH-SCHOOL STAFF

GEORGE HENRY COLEBANK, M. A., *Principal* (1928).
ELLA LOUISE BOGGESS, M. A., *Vocational Home Economics* (1937), 1928.
EDWARD C. BOWLBY, B. S. IND. ED., *Industrial Arts* (1932).
ANNA BROCHICK, M. A., *English* (1939), 1938.
J NED BRYAN, JR., A. B., *Mathematics* (1937), 1936.
KERMIT A. COOK, M. A.,[1] *Social Studies* (1935),
LUCY MAY COPLIN, M. A., *Social Studies* (1931), 1925.
EDWARD H. CUBBON, M. A.,[1] *Physical Education* (1936), 1933.
JAMES FREDERICK DAVIS, M. S., *Science* (1935).
GEORGE A. FEDERER, JR., M. A., *Science* (1934), 1928.
HOMER MILTON FIZER, B. S. P. E., *Physical Education* (1940).
H. GLENN FOGLE, M. S., *Vocational Agriculture* (1941).
BONNIE C. HATFIELD, A. B., B. MUS., *Music* (1940).
CHARLES W. HILL, M. A.,[2] *Vocational Agriculture* (1937).
GARNET JAMISON, M. A., *English* (1940).
MARY LOUISE LASHBROOK, M. A., *Home Economics* (1941).
ELIZABETH MARSHALL, M. A., *Physical Education* (1937).
HENRIETTA V. MARTIN, A. B., B. S. LIB. SCI., *Library* (1939).
J. DONALD NEILL, M. A., *Social Studies* (1936).
CARMI J. ODELL, M. A., *Commerce* (1939).
CONRAD PAFF, M. A., *Music* (1936).
KATE M. ROLLER, A. B., *Art* (1927).
MADALENE ESTELLA SMITH, A. B., *Commerce* (1940).
SYLVIA J. SOUPART, M. A., *English* (1931), 1925.
MAY L. WILT, M. A., *Mathematics* (1931), 1924.
MILDRED Y. WOOFTER, A. B., *English* (1937), 1936.

The Laboratory Elementary-School Staff

BLENDA L. PROUDFOOT, A. B., *Teacher of Intermediate Grades* (1940).
BONNIE C. HATFIELD, A. B., B. MUS., *Music and Physical Education* (1940).
BERNADINE HINZMAN, A. B., *Teacher, Primary Grades* (1940).

THE UNIVERSITY LIBRARY STAFF

WILLIAM PORTER KELLAM, A. M., *Librarian* (1939).
CHARLES HENRY AMBLER, PH. D., *Director, Division of Documents* (1934).
LONNA DENNIS ARNETT, PH. D., *Librarian Emeritus* (1935), 1910.
RUTH BLODGETT, A. B., *Circulation Assistant* (1940), 1932.
JENNIE DELAWDER BOUGHNER, A. B., *In charge of Circulation* (1938), 1915.
JESSIE GRIFFIN, A. B. IN L. S., *Reference Librarian* (1940).
EVELYN PRATT HITE (MRS.), A. B., *Cataloguer* (1924), 1922.
ELEANOR EDDY KNUTTI (MRS.), *Head, Extension Library Service* (1922).
JESSIE B. MADIGAN, *Assistant in Catalogue Department* (1932).
VIRGINIA MADIGAN, B. S., *Reference Assistant* (1930).
ELIZABETH BROWNFIELD NEEL, *Order Clerk* (1936).

[1]On leave 1940-41.
[2]On leave Feb. 1 to June 30, 1941.

BYRD LEA PICKENS, M. A., *Reserve Desk* (1930).
MARGARET VIRGINIA REAY, B. S. IN L. S., *Assistant Cataloguer* (1927).
MILDRED A. REED (MRS.), A. B.,[1] *Circulation Assistant* (1931).
FLORENCE K. REESE, A. M., *Instructor in Library Science* (1935).
MARY VIRGINIA SWISHER, *Circulation Assistant* (1940).
ANDREW VALENTINE WILEY, A. B., *Reference Assistant* (1940), 1930.

RALPH MILTON WHITE, LL. B., *Librarian, College of Law* (1940).

[1]Resigned Sept. 15, 1940.

THE WEST VIRGINIA AGRICULTURAL EXPERIMENT STATION STAFF

CLAYTON ROBERTS ORTON, PH. D., *Director* (1938), 1929.
MARTIN ABRAHAM ABRAHAMSEN, PH. D., *Assistant Agricultural Economist* (1936).
RICHARD ATKINS ACKERMAN, M. S., *Assistant Dairy Husbandman, in charge of Reymann Memorial Farms* (P. O. Wardensville, W. Va.) (1933), 1930.
MARVIN OWENS AKINS, B. S., *Graduate Assistant in Animal Husbandry* (1940).
WALTER WARDLAW ARMENTROUT, PH. D., *Agricultural Economist* (1934).
ANTHONY BERG, M. S., *Associate Plant Pathologist* (1925), 1913.
LOWELL BESLEY, M. F., *Associate Forester* (1938).
CHARLES FRANKLIN BISHOP, A. B., *Graduate Assistant in Plant Pathology* (1940).
ROBERT HOWELL BLACK, B. S., *Graduate Assistant in Animal Husbandry* (1940).
GEORGE AUGUSTUS BOWLING, M. S., *Associate Dairy Husbandman* (1938), 1931.
EUGENE PAUL BRASHER, M. S.,[1] *Assistant Horticulturist* (1940), 1936.
WALTER MARION BROADFOOT, B. S., *Assistant in Agronomy* (1936).
MAURICE GRAHAM BROOKS, M. S., *Assistant Forester* (1938).
DILLON SIDNEY BROWN, M. S., *Assistant in Horticulture* (1939).
WILLIAM CARSON BROWN, PH. D., *Assistant Dairy Husbandman* (1939), 1934.
MARION LYNN BUCHANAN, M. S.,[2] *Assistant in Animal Husbandry* (1937), 1935.
JACK B. BYERS, B. S. FOR., *Assistant in Forestry* (P. O., Kingwood) (1940).
HAZEL CRABILL CAMERON, M. A., *Associate Physiologist* (1936).
JOSEPH LINCOLN CARTLEDGE, PH. D., *Assistant Geneticist* (1938), 1936.
WILLIAM HENRY CHILDS, M. S., *Assistant Horticulturist* (1940), 1931.
THOMAS BAIRD CLARK, M. S., *Assistant Poultry Husbandman* (1935), 1927.
GENEVIEVE B. CLULO, A. M., *Assistant Plant Pathologist* (1940), 1932.
WILLIAM HOWARD CONKLE, M. S., *Assistant in Horticulture* (1941).
FERRIS DEWEY CORNELL, JR., PH. D., *Associate Agricultural Economist* (1937), 1921.
WILLIAM H. DUIS, B. S., M. S., *Assistant in Horticulture* (1937).
IRA JERIAH DUNCAN, PH. D., *Assistant Agricultural Chemist* (1936), 1930.
ROBERT BARCLAY DUSTMAN, PH. D., *Agricultural Chemist* (1929), 1924.
ARTHUR PINGREE DYE, M. S. AGR., *Assistant Horticulturist* (1940), 1923.
HARVEY D. ERICKSON, PH. D., *Assistant Forester* (1937).
SIDNEY LONGMAN GALPIN, PH. D., *Hydrologist* (1938), 1927.

[1]Resigned Feb. 1, 1941.
[2]On leave, 1940-41.

EDWIN GOULD, B. S. AGR.,[3] *Associate Entomologist, in charge of University Experiment Farm* (P. O. Kearneysville) (1938), 1929.

ELWOOD OBED HAMSTEAD, M. S.,[3] *Assistant in Entomology* (P. O. Kearneysville) (1939), 1936.

HARRY ORAM HENDERSON, PH. D., *Dairy Husbandman* (1928), 1919.

TORKEL HOLSOE, M. F., *Assistant Forester* (1938).

GERALD JENNY, M. S., *Agricultural Editor* (1929).

JOHN CHARLES JOHNSTON, *Chief Clerk* (1914)..

JULIAN GILBERT LEACH, PH. D., *Plant Pathologist* (1938).

REID HAYWOOD LEONARD, B. S. AGR., *Graduate Assistant in Agricultural Chemistry* (1940).

LEON H. LEONIAN, PH. D., *Mycologist* (1934), 1922.

VIRGIL GREENE LILLY, PH. D., *Assistant Physiologist* (1937), 1927.

EDWARD ALEXANDER LIVESAY, D. SC., *Animal Husbandman* (1919).

THEODORE CLINTON MCILVAINE, PH. D.,[3] *Associate Agronomist, in charge of Lakin Experiment Farm* (P. O. Lakin, W. Va.) (1934), 1917.

LOUIS JOHN MANUS, M. S., *Assistant in Dairy Husbandry* (1936), 1932.

ABRAHAM STANLEY MARGOLIN, M. S., *Graduate Assistant in Plant Pathology* (1938), 1934.

RAY STANLEY MARSH, M. A., *Horticulturist* (1936).

ELDOR A. MARTEN, PH. D., *Assistant Plant Pathologist* (1939), 1936.

SUZANNE MAURY, A. B., *Graduate Assistant in Plant Pathology* (1940).

LEONARD FRED MILLER, M. S., *Assistant Agricultural Economist* (1940).

EARL NEIL MOORE, D. V. M., *Assistant Animal Pathologist* (1937).

JOHN RICHARD MULLIN, B. S., *Graduate Assistant in Plant Pathology* (1939).

CHARLES THOMPSON NEFF, JR., A. B., *Treasurer* (1934).

WILBUR MARK NELSON, A. R. P. S., *Photographer* (1939).

LEONARD MARION PEAIRS, PH. D., *Entomologist* (1912).

W. CLEMENT PERCIVAL, PH. D., *Forester* (1939), 1934.

GEORGE GORDON POHLMAN, PH. D., *Agronomist* (1938), 1930.

DEXTER NEVINS PUTNAM, B. S., *Assistant in Dairy Husbandry* (1940), 1938.

JOHN HARRISON RIETZ, D. V. M., *Animal Pathologist* (1937), 1927.

TOM DOYLE RUNNELS, B. S., *Assistant in Poultry Husbandry* (1940), 1938.

FRANK WILLARD SCHALLER, B. S., *Assistant in Agronomy* (1939), 1937.

BURCH H. SCHNEIDER, PH. D., *Associate Animal Husbandman* (1938).

EDNA DAVIS SHAFFER, A. B., *Assistant in Agronomy* (1937).

RICHARD HUYETTE SUDDS, PH. D., *Associate Horticulturist* (1940), 1937.

CARLTON FULTON TAYLOR, PH. D., *Assistant Plant Pathologist* (1938).

EDWARD HENRY TYNER, PH. D., *Assistant Agronomist* (1938).

AUDREY HOWARD VANLANDINGHAM, PH. D., *Assistant Chemist* (1934), 1929.

DAVID VOLKIN, B. S. AGR., *Assistant in Agricultural Economics* (1939), 1938.

CHARLES EDWARD WEAKLEY, JR. M. A., *Associate Chemist* (1938), 1907.

ROLAND OSCAR WEIBEL, M. S., *Assistant in Agronomy* (1938).

EVERETT CARL WEITZELL, M. S., [3] *Assistant Agricultural Economist* (1936).

EDWIN J. WELLHAUSEN, PH. D., *Associate Geneticist* (1938).

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[3]In cooperation with the United States Department of Agriculture.

KYLE CHESTER WESTOVER, PH. D., *Associate Horticulturist* (1936), 1921.
ERNEST THOMAS WIGHTMAN, M. S. AGR., *Assistant Poultry Husbandman* (1934), 1924.
CHARLES VINYARD WILSON, M. S., *Associate Animal Husbandman* (1938), 1919.

The Station Staff Committees

PROJECTS: Messrs. CORNELL (chairman), BESLEY, and TYNER.
PUBLICATIONS: Messrs. LEACH (chairman), WELLHAUSEN, and VANLANDINGHAM.

THE WEST VIRGINIA AGRICULTURAL EXTENSION DIVISION STAFF

JOHN OLIVER KNAPP, B. S. AGR.,[3] *Director* (1938), 1917.
EUGENE WINSLOW BEATTY, B. S.,[3] *Assistant Extension Forester* (1940), 1935.
ANNA MILDRED BOGGS, A. B.,[3] *District Home Demonstration Agent* (1936), 1927.
IRA BROOKS BOGGS,[3] *State Boys' Club Agent* (1933), 1929.
LELAND BOOTH, B. S. AGR., *Associate Editor* (1933).
JACK B. BYERS, B. S. FOR.,[3] *Assistant Extension Forester* (P. O., Kingwood) (1940).
JAMES HARRIS CLARKE, M. S., *Assistant Extension Economist* (1939).
BENJAMIN FRANKLIN CREECH, B. S. AGR.,[3] *Extension Animal Husbandman* (1919).
CARLTON P. DORSEY, B. S. AGR.,[3] *District Agent* (1938), 1927.
JANE FARWELL, A. B.,[3] *Assistant Recreation Specialist* (P. O., Oglebay Park, Wheeling) (1940).
RAY JEROME FRIANT, B. S.,[3] *Extension Agronomist* (1929), 1922.
RUSSELL HENDERSON GIST, B. S. AGR.,[3] *State Agent* (1933), 1924.
AUSTIN GERALD GOTH, M. S.,[3] *Extension Economist* (1937).
THOMAS DAVIS GRAY, B. S. HORT.,[3] *Extension Landscape Architect* (1920).
WALTER CARL GUMBEL,[3] *Extension Soil Conservationist* (1938), 1929.
CHARLES HENRY HARTLEY, B. S. AGR.,[3] *State Club Leader* (1933), 1914.
GERALD HEEBINK, M. S.,[3] *Extension Dairy Husbandman* (1935).
HARRY ORAM HENDERSON, PH. D., *Dairy Husbandman* (1933).
GERTRUDE HUMPHREYS, A. B.,[3] *State Home Demonstration Agent* (1928), 1918.
HAROLD MARTENEY HYRE, M. S.,[3] *Extension Poultryman* (1933), 1931.
ARNOLD LOUIS KELLER, M. S. AGR.,[3] *Extension Horticulturist in Vegetable Gardening* (1936).
JULIAN GILBERT LEACH, PH. D., *Plant Pathologist* (1938).
EDWARD ALEXANDER LIVESAY, D. SC., *Animal Husbandman* (1933).
RAY STANLEY MARSH, M. A., *Horticulturist* (1936).
CHARLES THOMPSON NEFF, JR., A. B., *Financial Secretary* (1934), 1927.
WILBUR MARK NELSON, A. R. P. S., *Editorial Assistant* (1939).
HUGH WILLARD PRETTYMAN, B. S. AGR.,[3] *Extension Horticulturist in Marketing* (P. O. Inwood) (1917).
INEZ PRUDENT, M. S.,[3] *Extension Specialist in Foods and Nutrition* (1936).
MILDRED M. READ, M. S.,[3] *State Girls' Club Agent* (1940).
WILLIAM HAVARD ROBERTS, B. S.,[3] *District Agent* (1935).
WALTER CLINTON SCHNOPP, B. S. AGR.,[3] *Extension Editor* (1929), 1923.
EDWARD LEE SHAW, B. S. AGR., *Extension Sheep Specialist* (1917).

[3]In cooperation with the United States Department of Agriculture.

EVERETT CLIFTON SHERWOOD, M. S.,[1] [3] *Extension Plant Pathologist* (1920).
JOHN BRONDON SMITH, B. S. AGR., *Assistant Extension Poultryman* (1938).
REYNOLDS B. SMITH, M. S.,[3] *Extension Forester* (1935).
CHARLES ELLSWORTH STOCKDALE, M. S.,[3] *State Executive Officer* (1937), 1916.
RICHARD HUYETTE SUDDS, PH. D., *Extension Horticulturist* (1938).
JEANNETTA WEIL, *Chief Clerk in charge of Clerks and Stenographers* (1919), 1911.
CHARLES VINYARD WILSON, M. S., *Assistant Extension Animal Husbandman* (1933).

[1]In cooperation with the State Department of Agriculture.
[3]In cooperation with the United States Department of Agriculture.

THE MINING AND INDUSTRIAL EXTENSION STAFF

DENNIS LEE MCELROY, B. S. E. M., M. S., *Director of Extension in the Industrial Sciences, Director of the School of Mines, and Professor of Mining Engineering* (1939), 1928.
GAROLD RALPH SPINDLER, B. S. E. M., *Assistant Director of Mining Extension and Director of Fire Service Extension Schools* (1938), 1934.
CLARENCE O. CARMAN, *Instructor in Mining Extension* (1937).
A. PAGE DICKENS, *Instructor in Mining Extension* (1937).
CHARLES T. HOLLAND, B. S. E. M., M. S., *Instructor in Mining Extension* (1939).
C. O. KANE, *Instructor in Mining Extension* (1936).
J. S. POUNDSTONE, *Instructor in Mining Extension* (1924).
W. A. STAAB, E. M., *Associate Professor of Mining Engineering* (1939), 1926.
W. H. STEEN, *Instructor in Mining Extension* (1935).
W. B. TALBOTT, *Instructor in Mining Extension* (1927).
HOBART WATSON, *Instructor in Mining Extension* (1925).
LELAND H. WINGER, B. S. E. E., *Instructor in Mining Extension* (1937).

THE MILITARY STAFF

WILLIAM R. ORTON, B. S., LIEUTENANT COLONEL, INFANTRY, *Commandant* (1939).
HARVEY SHELTON, B. S., LIEUTENANT COLONEL, INFANTRY (1938).
MAYBIN H. WILSON, B. E. IN C. E., MAJOR, CORPS OF ENGINEERS (1936).
CHARLES C. CASE, JR., A. B., FIRST LIEUTENANT, INFANTRY (1940).
HAROLD A. WILLIAMS, B. S. ED., SECOND LIEUTENANT, INFANTRY (1940).
JAMES S. DAWSON, B. S. P. E., SECOND LIEUTENANT, INFANTRY (1940).
CECIL B. HIGHLAND, JR., A. B., SECOND LIEUTENANT, INFANTRY (1940).
GEORGE G. MEGRAIL, B. S., IN CH. E., SECOND LIEUTENANT, ENGINEERS (1941).

JOSEPH E. YOUNG, STAFF SERGEANT, INFANTRY (D. E. M. L.) (1932).
ARTHUR W. SIDDONS, SERGEANT, CORPS OF ENGINEERS (D. E. M. L.) (1941).
ARTHUR J. MCCLUNG, SERGEANT, INFANTRY (D. E. M. L.) (1939).
LEO R. TUTTLE, SERGEANT, CORPS OF ENGINEERS (D. E. M. L.) (1940).
THOMAS D. CHISMAN, SERGEANT, INFANTRY (D. E. M. L.) (1940).
DENZIL A. RAMSEY, PRIVATE, INFANTRY (D. E. M. L.) (1941).

THE ATHLETIC STAFF

ROY M. HAWLEY, A. B., *Director of Intercollegiate Athletics* (1938), 1935.

RAYMOND HARRY CARNELLY, B. S. M. E., *Coach in Freshman Football and Basketball* (1940).

DAVID ALFRED CHRISTOPHER, A. M., *Office Manager* (1923).

ALBERT C. GWYNNE, M. S., *Coach in Wrestling* (1934).

EDWARD HIRSCHBERG, A. B., *Assistant Coach in Football* (1940).

WILLIAM FRANKLIN KERN, A. B., *Coach in Football* (1940).

FRANK W. KUTZ, B. S. ED., *Assistant Coach in Football* (1940).

SAMUEL JOHN MORRIS, M. D., *Medical Adviser* (1935).

WILLIAM NEELY, A. B., LL. B., *Coach in Boxing* (1940).

MICHAEL J. NICKSICK, B. S., *Assistant Coach in Football* (1940).

RICHARD A. RAESE, A. B., *Varsity Basketball Coach* (1938).

IRA ERRETT RODGERS, A. B., *Assistant Coach in Football and Head Coach in Baseball* (1931), 1920.

ARDEN SKIDMORE, *Director of Athletic Publicity* (1939).

ARTHUR NEWELL SMITH, A. B., *Coach in Track Athletics, Cross-Country, and Athletic Trainer* (1931), 1923.

LOWRY MCELVAINE STOOPS, A. B., *Assistant Director of Intercollegiate Athletics* (1925).

THE ATHLETIC BOARD

FACULTY MEMBERS: Messrs. THOMPSON (chairman), ENNIS, GRUMBEIN, STEMPLE, and STRAUSBAUGH.

ALUMNI MEMBERS: Dr. C. B. PRIDE, Morgantown, and Mr. FRED E. DEEM, Clarksburg.

DIRECTOR OF INTERCOLLEGIATE ATHLETICS: Mr. HAWLEY.

STUDENT MEMBER: CHARLES HOCKENBERRY.

EXECUTIVE COMMITTEE: Messrs. THOMPSON, HAWLEY, PRIDE, and STEMPLE.

FINANCE COMMITTEE: Messrs. THOMPSON, GRUMBEIN, HAWLEY, and PRIDE.

THE STANDING COMMITTEES*

The University

COMMITTEE ON STUDENT AFFAIRS (GENERAL): Mr. ASPINALL, Director of Student Affairs (chairman); and the chairman of each of the following sub-committees: convocations and public exercises, discipline, student residences, social affairs, University calendar, student publications, student body, student organizations, and prizes, scholarships, and loan funds.

(The Director of Student Affairs is a member *ex officio* of all the sub-committees on social affairs.)

CONVOCATIONS AND PUBLIC EXERCISES: Messrs. ASPINALL, CROCKER, CUTHBERT, and HARRIS; student members BETTY LOU FREISMUTH and WILLIAM MILLER.

*The first-named member serves as chairman.

SOCIAL AFFAIRS: Messrs. DARBY, CORNELL, SAMUEL MORRIS, SHELTON, and WOOD; Misses ARNOLD, GRIFFIN, and PALMER; student members JOHN W. BROWN, JR., DELFORD LEE COTTRILL, CAROLYN EDGAR, and MILDRED SELBY.

PRIZES, SCHOLARSHIPS AND LOAN FUNDS: Messrs. ASPINALL, ARMENTROUT, BRAWNER, CUTHBERT, and STONE; Misses ARNOLD and STALNAKER.

DISCIPLINE: Messrs. BOOMSLITER and LAZZELL; Mrs. DEATRICK.

STUDENT PUBLICATIONS: Messrs. REED, GRUMBEIN, HAWLEY, HAYES, JACOBS, PEAIRS, and WILLIAMS; student members CATHERINE CURRAN and ROBERT PROVENCE.

STUDENT ORGANIZATIONS: Messrs. STEMPLE, DUSTMAN, and FRIDLEY; Misses GAWTHROP and TURNER.

STUDENT RESIDENCES: Messrs. ASPINALL, DARBY, STONE, and R. R. SUMMERS; Misses ARNOLD and WADDELL; student members BERNADINE BESS and JACK M. HERTZOG.

STUDENT FUND: Mr. ASPINALL and Miss ARNOLD; student member JAMES MCCARTNEY.

STUDENT BODY: JAMES MCCARTNEY, president; HELEN TAYLOR, vice-president; CHARLES BROWN, senior representative; JANE SHAFFER, senior representative; ROBERT SPIKER, junior representative; BETTY STEMPLE, junior representative; ROBERT MELLACE, senior class president; JACKSON BROWNING, junior class president; GUY PETERSON, sophomore class president; FRANK YOKE, freshman class president.

OFF-CAMPUS SCHEDULES: Messrs. ASPINALL, SHORTRIDGE, and THOMPSON.

NATIONAL YOUTH ADMINISTRATION: Messrs. DADISMAN, ASPINALL, CLARK, and STONE; Miss ARNOLD.

INSTRUCTIONAL POLICIES AND PRACTICES: Messrs. STRAUSBAUGH, COLLETT, HARRIS, HAYES, PEAIRS, SAMUEL, SPIKER, SPRAY, and WILLIAMS.

ENTRANCE: The Registrar and the deans and directors of all colleges and schools admitting freshmen.

STUDENT ENGLISH: Messrs. D. D. JOHNSON, BISHOP, BOOMSLITER, PEAIRS, and STRAUSBAUGH.

STUDENT FEES: Messrs. NEFF, ASPINALL, and WILLIAMS.

MILITARY AND PHYSICAL EDUCATION BOARD: Messrs. WILSON, THOMPSON, and R. R. SUMMERS.

TEACHER TRAINING: Messrs. L. B. HILL, M. G. BROOKS, CHITWOOD, COLEBANK, DADISMAN, DARBY, D. D. JOHNSON, KOEHLER, PARSONS, and SAMUEL; Mrs. DEATRICK; Misses COLWELL, HINKEL, and NOER.

COUNCIL ON BIOLOGY: Mr. DODDS and representatives from all departments, colleges, and schools engaged in work in any phase of the field of biology.

LIBRARY: Messrs. KELLAM, AMBLER, ARNETT, COLWELL, DODDS, HAYES, JACOBSON, D. D. JOHNSON, and PEAIRS.

SUMMER SESSION: Messrs. DADISMAN, FRIEND, HUDELSON, C. R. ORTON, and SHORTRIDGE.

PUBLICATIONS: Messrs. FRIEND, DICKINSON, HODGE, JACOBS, JENNY, D. D. JOHNSON, PEAIRS, and REED.

UTILIZATION OF BUILDINGS AND EQUIPMENT: Messrs. BALDWIN, GRUMBEIN, HAYES, and HUBERT HILL.

BUILDINGS AND GROUNDS: Messrs. GRUMBEIN, C. L. BROOKS, and DYE.

UNIVERSITY EXTENSION: Messrs. ASPINALL, DADISMAN, HUDELSON, MCELROY, C. R. ORTON, and SHORTRIDGE.

INDUSTRIAL EDUCATION AND RESEARCH: Messrs. CLARK, COLWELL, R. P. DAVIS, HODGE, MCELROY, C. R. ORTON, and PRICE.

RESOURCES OF THE STATE: Messrs. C. R. ORTON, CLARK, DOWNS, MCELROY, PRICE, SUNLEY, and WILLIAMS.

RADIO: Messrs. PRICE, M. G. BROOKS, JENNY, F. P. SUMMERS, THOMPSON, and WILLIAMS.

AVIATION: Messrs. HAYES, ASPINALL, R. P. DAVIS, KEISTER, and STONE.

VISUAL EDUCATION: Messrs. ALLEN, ASHBURN, JACOBS, JENNY, KELLAM, LEACH, and SEIBERT.

FRATERNITY AND SORORITY SCHOLASTIC RECORDS: Messrs. PEAIRS, LONG, and SAMUEL; Mrs. COLE.

The Colleges

SCHOLARSHIP:

College of Agriculture: Messrs. POHLMAN and PERCIVAL and Miss NESBITT.

College of Arts and Sciences: Messrs. WINTER, FORD, HARRIS, S. MORRIS, SPIKER, and SMITH.

College of Education: Miss POLLOCK and Messrs. HILL and STEMPLE.

College of Engineering and Mechanic Arts: Messrs. HALL, KOEHLER, and C. H. CATHER.

School of Journalism: Messrs. REED, MICHELSON, and WILD.

School of Medicine: Messrs. DODDS, CHANDLER, EMERSON, FENTON, and RAFFERTY.

School of Music: Messrs. CUTHBERT and SHEPARD and Miss HINKEL.

College of Pharmacy: Messrs. HAYMAN, BERGY, and GEILER.

School of Physical Education and Athletics: Messrs. SAMUEL, KUTZ, and WEBSTER; Misses GRIFFIN and HURST.

NOTE: For all other college committees see the announcements of the respective college or school in Part III of this Catalogue.

Fraternity Advisers

Beta Theta Pi, A. M. REESE; Delta Tau Delta, CARL M. FRASURE; Kappa Alpha, C. R. BISHOP; Kappa Sigma, A. J. DADISMAN; Phi Delta Theta, ROBERT COLWELL; Phi Kappa Psi, L. L. FRIEND; Phi Kappa Sigma, CHARLES L. LAZZELL; Phi Kappa Tau, DANA WELLS; Phi Sigma Delta, JULIUS COHEN; Phi Sigma Kappa, J. O. KNAPP; Pi Kappa Alpha, R. H. WHERRY; Pi Lambda Phi, STEPHEN F. CROCKER; Sigma Chi, THOMAS E. ENNIS; Sigma Nu, RUSSELL H. GIST; Sigma Phi Epsilon, H. G. WHEAT; Tau Kappa Epsilon, E. J. WELLHAUSEN.

Sorority Supervision

Supervision of all sororities (see page 76) on the Campus is vested in the Office of the Dean of Women.

Part II

General Information*

HISTORY

West Virginia University originated from the National Land-Grant (Morrill) Act of July 2, 1862, and the subsequent action of the Legislature in accepting and carrying out the provisions of the Act. On January 9, 1866, the board of trustees of the Monongalia Academy at Morgantown tendered to the Legislature, for use of the contemplated state or land-grant college, all its property, including Woodburn Female Seminary, on condition that the college should be located at Morgantown. On January 30, 1867, the Legislature accepted the property and on February 7 passed an act permanently establishing "The Agricultural College of West Virginia" and authorizing the Governor to appoint 11 suitable persons as a Board of Visitors.

The Visitors held their first meeting on April 3, 1867, at which time they appointed Dr. Alexander Martin president and established collegiate, scientific, and agricultural departments of instruction. Military training was introduced at this time under the provisions of the Morrill Act.

By an act of December 4, 1868, the name of the College was changed to "West Virginia University" and the "Board of Visitors" to the "Board of Regents." On July 1, 1919, the "Board of Regents" was merged in the "State Board of Education." By an act passed April 14, 1927, the control of the University was vested in a "Board of Governors."

Following the establishment of the University, expansion was rapid. The College of Law was added in 1878; the College of Engineering and Mechanic Arts in 1887; the Agricultural Experiment Station in 1888; the College of Agriculture and the School of Music in 1897; and the School of Medicine in 1902.

With the opening of the new century two decades of consistent growth were entered upon. A Department of Pharmacy was added to the School of Medicine in 1914; in the same year the Department of Home Economics, until then a unit in the College of Arts and Sciences, was transferred to the College of Agriculture. The Division of Agricultural Extension was organized in 1912, and Liberal Arts extension centers were established as early as 1916.

In 1917 an extensive building program was inaugurated, which has added eight major units to the Campus. The Engineering Experiment Station was organized in 1921 and the School of Mines in 1926. In 1927 the work in Education, hitherto administered in a department of the College of Arts and Sciences, was transferred to the newly-created College of Education. In 1928 the Division of Physical Education was created.

*NOTE: West Virginia University reserves the right, without further notice, to revise the organization, fees, offerings, and requirements herein announced.

Paralleling this development, faculties were methodically strengthened, curricular adjustments steadily undertaken, and foundations laid for social, industrial, and scientific research agencies as bases for still broader fields of service. The movement culminated in the order of the Board of Governors of January, 1930, providing for the establishment of a Graduate School looking beyond the degrees of Master of Arts and Master of Science, which the University had steadily conferred for half a century, to the more advanced curricula leading to the degree of Doctor of Philosophy.

In 1936 the Department of Pharmacy was discontinued as a unit in the School of Medicine and was established as a College of Pharmacy. A year later the Division of Physical Education and the Department of Athletics were combined to form the School of Physical Education and Athletics. The Course in Forestry, begun in 1935 as a two-year course in the College of Agriculture, in 1937 was enlarged to a full four-year course enabling this college to grant the degree of Bachelor of Science in Forestry. The unit then became the College of Agriculture, Forestry, and Home Economics. In 1939 the department of journalism was discontinued as a unit in the College of Arts and Sciences and was made the School of Journalism.

The University has had 12 regular presidents: Alexander Martin, 1867-1875; John W. Scott (acting), 1875-1877; John Rhey Thompson, 1877-1881; Daniel Boardman Purinton (acting), 1881-1882; William L. Wilson, 1882-1883; Robert C. Berkeley (Chairman of the Faculty), 1883-1885; Eli Marsh Turner, 1885-1893; Powell Benton Reynolds (acting), 1893-1895; James L. Goodnight, 1895-1897; Jerome Hall Raymond, 1897-1901; Daniel Boardman Purinton, 1901-1911; Thomas Edward Hodges, 1911-1914; Frank Butler Trotter (acting), 1914-1916; 1916-1928; John Roscoe Turner, 1928-1935; Robert Allen Armstrong (acting), 1935; Chauncey Samuel Boucher, 1935-1938; Charles Elmer Lawall (acting), 1938-39; 1939- .

LOCATION

West Virginia University is located in Morgantown, the seat of Monongalia County, immediately south of the Mason-Dixon line where it forms the boundary line between southwestern Pennsylvania and northern West Virginia. The West Virginia-Maryland boundary also is only a few miles distant to the eastward.

Morgantown is ten hours by rail from New York City, twelve hours from Chicago, and three hours from Pittsburgh. It may be reached from the east and west through Grafton, West Virginia, or Connellsville, Pennsylvania. It is served by two railroads, the Baltimore and Ohio and the Pennsylvania.

Motorists can reach Morgantown from the National Pike (U. S. Route 40) through Uniontown or Washington, Pennsylvania, Wheeling, West Virginia, or Cumberland, Maryland, and from the Northwestern Turnpike (U. S. Route 50) through Oakland, Maryland, or Grafton, West Virginia.

Morgantown is connected with the national network of motor bus lines through the Blue Ridge (Greyhound) system, and has frequent local service with other surrounding towns and cities.

THE PHYSICAL PLANT

West Virginia University's Campus comprises about 66 acres near the center of Morgantown on high ground overlooking the river and much of the surrounding countryside. The physical plant includes 29 State owned buildings or structures on the Campus, two buildings leased from private owners, five demonstration and experimental farms near Morgantown, three experimental farms and three agricultural extension centers located at suitable points throughout the State, a summer surveying camp for Civil and Mining Engineering students and a summer camp for Forestry students.

The structures on the main Campus, with dates of construction or acquisition, are: Martin Hall (1870), Experiment Station Building (1873), Woodburn Hall (1874), Commencement Hall* (1889), Science Hall (1893), Mechanical Hall (1902), Armory (1902), Old Library (1902), President's House (1905), Heating Plant (1906), Music Building (1914), Horticulture Greenhouse (1915), Medical Building (1916), Oglebay Hall (1918), Oglebay Annex (1933 and 1937), Woman's Hall (1919), Plant Pathology Greenhouse (1920), Law Building (1923), Mountaineer Field (1924), Cafeteria (1924), Hall of Chemistry (1925), Men's Field House(1928), Elizabeth Moore Hall (1928), Faculty Club (1928), School of Music Annex (1928), University Library (1931), University Demonstration High School (1933), two wings to Woman's Hall (1935), and Men's Dormitory (1935). Units under construction are the Mineral Industries Building, which will accommodate the School of Mines, the Department of Chemical Engineering, the Department of Geology, and the West Virginia Geological and Economic Survey; the Student Health Center; and an annex to Woman's Hall to accommodate 225 women.

The farms, with dates of acquisition, are: Dairy Husbandry Farm, 175 acres (1899), Horticulture Farm, 62.5 acres (1916), Animal Husbandry Farm, 321 acres (1916), Poultry Husbandry Farm, 20 acres (1916), and Agronomy Farm, 102 acres (1916) near Morgantown; University Experiment Farm at Kearneysville, Jefferson County, 158 acres (1930); Reymann Memorial Farms at Wardensville, Hardy County, 930 acres (1917); and Lakin Experiment Farm at Lakin, Mason County, 74 acres, leased from the State Board of Control (1921).

The agricultural extension centers, with dates of acquisition, are: the Demonstration Community Packing Plant at Inwood, Berkeley County (1919), the 4-H Club Camp at Jackson's Mill, Lewis County, (1921), and the Recreation Center at Oglebay Park, Ohio County (1926).

The following buildings are leased from private owners: Infirmary (1925) and Home Management House (1937).

FUNDS

The funds for maintaining the University, the Agricultural Experiment Station, and the Agricultural Extension Division are derived from the following sources: (1) Interest on the land-grant endowment of $115,750; (2) the Morrill-Nelson fund; (3) the Hatch fund; (4) the Adams fund; (5) the Smith-Hughes and the Smith-Lever funds; (6) the Purnell fund; (7) the Capper-

*Remodeled in 1939 and rededicated as "Powell Benton Reynolds Hall" in 1940.

Ketcham fund; (8) the Bankhead-Jones fund; (9) the Clarke-McNary fund; (10) biennial appropriations by the Legislature; (11) fees and tuition; (12) income derived from the work of the Agricultural Experiment Station and the College of Agriculture as well as the income from dormitories, dining halls, bookstore, student activities, etc.; and (13) contributions by private benefactors for the support of scholarships, loan funds, and prizes.

GOVERNMENT AND ORGANIZATION

The financial and business affairs of the University, as well as of all other State institutions, are directed by the *West Virginia Board of Control.* This Board is composed of three members, all of whom are appointed by the Governor, who also designates one member to be the Board's president.

The academic control of the University is vested in the *Board of Governors.* The Board is bi-partisan and consists of seven members who are appointed by the Governor for a term of four years.

The University year is divided into two semesters of 18 weeks each and a Summer Session of two terms of approximately six weeks each.

Matters of policy concerning the several instructional units of the University are determined by the *Council of Administration,* composed of the president, the registrar, and the deans and directors of all colleges and schools, as well as other administrative officers who may be called to take part in the deliberations of the Council.

The *University Senate,* a legislative body with original jurisdiction over all matters that concern the entire University and all matters that concern more than one college or division, is composed of the president, the registrar, all professors of full rank in all colleges, schools, and divisions, and all heads of departments.

The *Graduate Faculty,* composed of all faculty members who teach courses on the graduate level, sets the specific requirements and standards of quality for admission to candidacy for graduate degrees and for the award of graduate degrees. For a list of members of the *Graduate Council* see page 8.

The *Committee on Student Affairs* acts as an integral part of the whole organization of the University. Its program is bound up with that of the University as a whole, designed to serve the larger academic and social objectives of modern education. For a list of members see page 24.

The Colleges and Schools

The organization of the University, together with the dates of the establishment of the various colleges, etc., follows:

Colleges: College of Arts and Sciences, 1867; College of Law, 1878; College of Engineering and Mechanic Arts, 1887; College of Agriculture, 1897; College of Education, 1927; College of Pharmacy, 1936.

Schools: School of Music, 1897; School of Medicine: Courses in Medicine, 1902; School of Mines, 1926; Graduate School, 1930; the Summer School, 1898; School of Physical Education and Athletics, 1937; School of Journalism, 1939.

Divisions: Division of Military Science and Tactics, 1867; Division of Forestry, 1937; Division of Home Economics, 1937.

Experiment Stations and Research Bureaus: Agricultural Experi-

ment Station, 1888; Engineering Experiment Station, 1921; Bureau for Government Research, 1931; Division of Documents, 1934.

Extension Service: Agricultural Extension, 1912; Mining and Industrial Extension, 1914; Liberal Arts Extension, 1916; Extension in Education, 1916.

The College of Arts and Sciences, the College of Engineering and Mechanic Arts, the College of Agriculture, the College of Pharmacy, the School of Mines, the School of Physical Education and Athletics, and the School of Music are all degree-granting units admitting freshmen. The College of Law, the College of Education, the School of Medicine, and the School of Journalism are professional colleges and schools requiring from two to three years of academic training as a foundation for professional work. All graduate instruction is administered by the Graduate Council and the Graduate Faculty.

A full description of the organization and offerings of the colleges and schools of the University is found in Part III of this Catalogue.

The Summer Session

The forty-third Summer Session of the University will be held from June 11 to August 26, 1941. The session will be made up of two terms — the first of six weeks and the second of five weeks. The first term will begin Wednesday June 11, and end Tuesday, July 22. The second term will begin Wednesday, July 23 and end Tuesday, August 26. Classes will be held on Saturdays during the second term.

The requirements for admission and the character of the work offered are the same for the summer session as for the regular year.

Credit may be obtained towards the Bachelor's and Master's degree in most of the departments and schools. Offerings are varied from summer to summer so that students may complete the work for the Master's degree by attending summer sessions only.

For complete description of courses, see the Summer Session bulletin.

Courses for Teachers:

Many of the students enrolled in the summer session are teachers, school executives, and others interested in higher education. To meet the needs of these groups a wide range of both professional and subject-matter courses is offered for undergraduate and graduate students. Some of these courses are not offered in the regular year.

The University maintains under the direction of its College of Education a demonstration high school for observation and student teaching at the undergraduate level and for observation and practice supervision at the graduate level, and a laboratory elementary school for observation and practice supervision at the graduate level. Several Summer Session courses are designed to integrate with the work in one or the other of these schools.

Field Courses:

A number of courses offered for credit during the Summer Session are carried on entirely in the field — most of them during the first term. These include the botany and zoology field courses (6 hours' credit for either six-weeks course); the course in field biology (4 hours' credit for 4 weeks); the geology

summer camp (6 hours' credit for 6 weeks); and the forestry camp (6 hours' credit; required of and open to professional forestry students only). In all field courses, advanced registration is required.

Special Features:

The fourth Music Clinic conducted by the School of Music will be held from June 11 to July 2. Special work suited to instructors in music and to high-school students will be featured.

The fifth Athletic Coaching School of one week will be held August 4 to 9. Coaches from the leading schools of the country will assist local instructors in this work.

Other annual events held during the Summer Session are the Short Course in Coal Mining, the Fire-Service Extension School, the Appalachian Gas Measurement Short Course and the State Institute of School Journalism.

The Division of Military Science and Tactics

(1) Requirements:

West Virginia University, a beneficiary of the Act of Congress of 1862, offers a four-year course of instruction in military science and tactics. Military training was established in 1867 at the University's inception.

All male students not specifically exempt by the provisions of paragraph 5 (below) are required by chapter eighteen, article eleven, of the official code of West Virginia, and by orders of the Board of Governors of the University promulgated pursuant thereto, to complete to the satisfaction of the professor of military science and tactics two years (four semesters) of basic military training (i. e., Military Science 1, 2, 3, 4). Completion of the two-year basic course in military science and tactics is required for graduation.

(2) The Curriculum:

The curriculum in military science and tactics embraces four years of work. Courses are divided into basic and advanced courses.

(a) The Basic Course.

The first two (2) years of instruction in military science and tactics comprise the Basic Course. All male students not specifically exempt are required to enroll in and pursue this course. Satisfactory completion thereof is a requisite for graduation. Instruction is given for three hours a week throughout the school year. One (1) hour's credit is awarded for each semester's work satisfactorily completed during the first year's course. Two (2) hours' credit is awarded for each semester's work satisfactorily completed during the second year's course.

(b) The Advanced Course.

The third and fourth years of work in military science and tactics comprise the advanced course. This course is elective, and enrollment therein is contingent upon selection by the professor of military science and tactics. Selection is based upon the student's record in the Military Division, on his academic standing in his college, and on other factors. Students enrolled in the Advanced Course are required to take five (5) hours' training per week throughout the school year. Three (3) hours' credit is awarded for each semester satisfactorily

completed. This credit may not be counted towards a degree, however, in all colleges and schools of the University. The maximum elective credit that may be counted in Advanced Military Training towards a degree in the various schools and colleges is as follows:

College of Agriculture (Agriculture students only)	12 Sem. Hrs.
College of Arts and Sciences	12 Sem. Hrs.
College of Engineering	4 Sem. Hrs.
College of Education	No credit
College of Law	No credit
College of Pharmacy	6 Sem. Hrs.
School of Mines	4 Sem. Hrs.
School of Music	No credit
School of Physical Education and Athletics	No credit
School of Journalism:	
General Curriculum	12 Sem. Hrs.
News/Editorial Curriculum	No credit

Students electing the Advanced Course are required to attend one summer camp of six weeks' duration, for which all expenses are paid.

(3) Appointment to Officers' Reserve Corps:

Graduates of the Division of Military Science and Tactics are eligible to appointment as second lieutenants in the Officers' Reserve Corps. They are also eligible to commission as first lieutenants in the National Guard of the State.

(4) Expenses:

Every student enrolling in military science must anticipate certain expenses incident to the pursuance of this course. The average cost to the students of the several classes is detailed below.

First-Year Student (Freshman)

Military deposit	$ 10.00
Shoes	5.00
Socks (2 prs. cotton; 2 prs. wool)	.90
Text	2.10 (Inf.)
	1.90 (Engr.)
	$17.80 — $18.00

Second-Year Student (Sophomore)

Military deposit	$ 10.00
Text	1.25 (Inf.)
No shoes or socks required if purchased in Freshman year.	
	$11.25 — $11.90

Third-year Student (if accepted for Advanced Course)

Military deposit	$ 10.00
Text	2.70 (Inf. or Engr.)
Additional pair of shoes if ones from Freshman year are worn out	5.00
Additional socks (2 prs. cotton, 2 prs. wool)	.90
	$ 18.60 (Inf. or Engr.)

Fourth-Year Student

Military deposit	$ 10.00
Text	2.30 (Inf.)
	2.70 (Engr.)
	$12.30 — $12.70
	(Inf.) (Engr.)

The Military deposit referred to above is required of each student enrolled in the Division of Military Science and Tactics to cover any loss or damage of Government property occasioned by the fault or neglect of the student. This sum ($10.00) less such deductions as are made for the loss or damage of Government property or for other reasons, will be refunded to the cadet at the expiration of the school term upon return of the property. The military deposit is paid to the financial secretary at the time of registration.

(5) Exemptions:

The following classes of students shall not be required to enroll themselves in the Division of Military Science and Tactics but may elect to do so:

(i) Students who are citizens of a foreign country and who do not intend to become citizens of the United States.

(ii) All students who at the date of entrance into the University are more than 23 years of age, and former students over 23 years of age who re-enter the University after an absence of three years.

(iii) All graduate students.

(iv) All students whose studies are entirely in the School of Music.

(v) All students who are taking only the short course, or the special winter course, or extension work in the University.

(vi) All students who at the time of matriculation have completed not less than 58 hours of work, and all who have credit for 4 hours of military science or 1 unit of entrance credit in military from a recognized military academy. Those having one, two, or three hours' credit of military science will be exempt from a like number of semesters. Similarly, each Citizens' Military Training Camp successfully completed may be used for an exemption from one semester. In the latter case, however, the student will not be eligible to enroll in the Advanced Course (third and fourth years).

(vii) All students who are physically unable to perform military duty.

Exemptions for cases (i) to (vi) will be determined by the adviser from the student's records. Claims for exemption under (vii) will be acted upon by the University physician.

(6) Organization:

The Division is in charge of and instruction is directed by an officer of the United States Army detailed by the War Department as Professor of Military Science and Tactics. His staff is composed of officers and non-commissioned officers—all United States Army personnel; one band director emeritus; and one band director.

The Corps of Cadets is organized as a regiment of three battalions—six companies of infantry, three companies of engineers, and a band. Students in

the College of Engineering and Mechanic Arts and in the School of Mines are enrolled in the Engineer unit. All others are enrolled in the Infantry unit.

(7) The University Band:

The University Band functions under the Military Division, the responsible head being the Commandant of Cadets. Membership is drawn from all classes, including graduate students, of the various schools and colleges of the University.

Places in the band are determined by audition, and the members concerned take the required military training as may be determined by the Commandant of Cadets.

Band instruments are furnished by the Federal and State Governments. After completing two years in the band, especially qualified bandsmen may continue service in the band upon invitation, and receive allowances in the form of remission of certain fees.

(8) Awards:

Awards for excellence in military science and tactics are offered annually. For a list of these awards see pages 72 to 74.

(9) Uniform:

A uniform for each cadet is furnished by the Federal Government.

Shoes are purchased by the student, must be of a prescribed pattern, and are obtainable only through the authorized contractor .

The University Library

The Library dates from the establishment of the University, for Monongalia Academy possessed a small library which became the nucleus of a library for the newly formed institution.

Realizing that experience in the use of books is an essential part in the training of young men and women, the Library is striving to build strong, well-balanced collections in all subject fields included in the curricula of the University. To this end the Library is planned primarily to supply the study and research requirements of the staff and students. Its entire facilities, however, are available to all residents of the State for reference, and much of its materials may be borrowed by citizens of the State.

The total number of catalogued volumes is approximately 171,500. In addition to these volumes, there are a large number of uncatalogued Federal and State documents. About one thousand periodicals and newspapers are received currently, many of them being gifts.

The Library has a special collection of West Virginia books, manuscripts, and newspapers. It is estimated that there are more than 500,000 pieces in the collection of private manuscripts, about 3,000,000 items in the collection of court records, and several thousand volumes of newspapers, periodicals, and books.

Except during vacations and holidays, the library is open from 7:55 a. m. to 10:00 p. m., Monday through Friday; from 7:55 a. m. to 5:00 p. m. on Saturday; and from 2:00 p. m. to 5:00 p. m. on Sunday. During vacations the hours are from 8:30 a. m. to 5:00 p. m.

University Extension

The University maintains an Extension Division through which instruction is given off the Campus. The work of this division is under the general supervision of the Director of University Extension. The work given in extension courses corresponds in every particular to that given in the same courses on the Campus. Students taking extension courses for credit must satisfy fully all requirements for admission to the University and, before registering, should file with the Registrar of the University complete official transcripts of their entrance credits.

The maximum undergraduate credit that may be counted towards any degree for extension work conducted by the University is 48 semester hours. The maximum undergraduate credit that may be counted towards a degree for extension work taken in other institutions is 30 semester hours. No more than 15 hours of work taken in graduate extension courses may be counted towards any graduate degree.

No University extension courses may be offered for credit without the approval of the Director of University Extension. Library and laboratory facilities for each course must be approved by the Director and, in the case of courses for graduate credit, by the Graduate Council. Reference books for the use of extension students may be borrowed from the University Library upon the order of the Director of University Extension, subject to the approval of the Library Committee. Postal charges must be paid by the individual or groups for whom the books are borrowed.

A fee of $8.00 per semester hour is charged for each extension course offered for undergraduate credit. A fee of $10.00 per semester hour is charged for each extension course offered for graduate credit.

For further information, write to the Director of University Extension or to the Registrar.

The University Book Store

The University Book Store, located in the basement of the Law Building, is maintained for the convenience of the students. It is open during customary business hours and keeps on hand constantly textbooks, stationery, drafting-room instruments and supplies, etc., which are available to the students at a reasonable price.

The Bureau of Instructional Research

The Bureau of Instructional Research was established at the University in 1938 by action of the Board of Governors. Its purpose is to provide technical assistance to members of the Faculty in improving the effectiveness of instructional procedures, especially in making and interpreting examinations. It also is charged with the duty of making factual studies within and without the University to assist the Administration and the Faculty in the formulation and execution of policies. The office of the Bureau in the Administration Building is provided with modern machines and equipment for handling statistical data.

Musical Organizations

The University and Community Orchestra is open to all students who are proficient in the use of orchestral instruments. Rehearsals are held weekly. Students participating receive 1 hour of credit each semester.

The University Women's Glee Club is open to all University girls who can sing a part. Rehearsals are held weekly. Students participating receive one hour of credit per semseter.

The University Men's Glee Club is open to all University men who can sing a part. Rehearsals are held weekly. Students participating receive one hour of credit per semester.

The University and Community Mixed Chorus is open to all students who can sing a part. Rehearsals are held weekly. Students participating receive one hour of credit per semester.

The University Band is open to all University men who can qualify (see page 35). Concerts are given locally in addition to out-of-town appearances.

University Broadcasting

Broadcasting of radio programs to the people of West Virginia was established at the University in May, 1938, when, through the generosity of Station WMMN, Fairmont, a remote-control studio was built on the University Campus. By arrangement with this station, two programs are broadcast regularly each week from the Campus. The programs are of an educational, informative, or entertaining nature. The hours are from 8:05 to 8:30 p. m. on Mondays and Wednesdays. Other programs are broadcast from time to time as occasion warrants.

The University is prepared to open its doors to all West Virginia stations that wish to broadcast special Campus events.

LIVING ACCOMMODATIONS

The University maintains two large dormitories, one for men and one for women. For information as to accommodations and rates, address the office of the Director of Residence Halls and Commons. Cost of room and board in the dormitory for men ranges from $270.00 to $325.00 per year; in the dormitory for women, from $287.00 to $225.00 per year. Although no change in the present rates is expected, the University reserves the right to change these rates when necessity requires.

The following rules are in effect:

No student will be permitted to live in other quarters until after the Men's Dormitory and Woman's Hall with its two wings are fully occupied.

In the assignment of rooms in these buildings all freshmen shall be required to take rooms therein before members of any other classes shall be assigned rooms therein, no freshman being allowed to live outside the dormitories if there is room in them.

In enforcing the above rules the following exceptions shall be made:

(1) Where the parents or legal guardians of the students reside in Morgantown or within commuting distance of the University. these rules shall not apply.

(2) Where the home of the student is within such distance that it is entirely practicable for him to live in his home and reach the University by car or otherwise for all his classes, these rules shall not apply.

(3) Where students above the rank of freshman reside in approved sorority or fraternity houses under the supervision of the Dean of Men and Dean of Women, these rules shall not apply.

(4) Where conditions of employment (such as firemen in various buildings and homes, employment on dairy and experimental farms, etc.) require residence on the premises, these rules shall not apply.

The University reserves the right to assign rooms in the dormitories to students other than freshmen after August 20 of each year.

When the space is needed for underclass women, no senior sorority women will be permitted to live in Woman's Hall if there is room for her in her sorority house.

More detailed informaton may be found in the Dormitory Bulletin, a copy of which will gladly be furnished by the office of the Director of Residences and Commons.

Board and lodging are available also in private dwellings in Morgantown at about the same rates as obtain in the dormitories. For further information concerning houses on the approved list men should address the office of H. E. Stone, West Virginia University, Morgantown. Women should communicate with the office of the Dean of Women, Morgantown.

Student Center:

The soda fountain is open during most of the day. Arrangements may be made with the dietitian for special dinners in the evening. The counter is open regularly for lunch and for dinner at noon on Sunday. This building is located between Mechanical Hall and the Administration Building.

ADMISSION TO THE UNDERGRADUATE COLLEGES AND SCHOOLS

Methods of Admission

Students are admitted to the University either by examination or on certificates from an accredited secondary school.[1] In the latter case the certificates must set forth the work of the student in detail. Diplomas or certificates of a general nature are not sufficient.

Candidates for admission to the University must be at least 16 years of age. They must present certificates of good moral character, and if from other colleges or universities, they must present letters of honorable dismissal.

Candidates for admission who do not present entrance certificates, or who come from other institutions of learning without letters of honorable dismissal, may at the discretion of the Committee on Entrance be allowed to register provisionally. In every such case the Registrar will make immediate inquiry of the institution from which the applicant comes, and if satisfactory certificates of credit and good standing cannot be obtained, the registration will

[1]In accrediting West Virginia secondary schools the University follows the classification made by the State Supervisor of High Schools.

be cancelled and the fees paid by the applicant will be returned. A provisional registration will not ordinarily be continued for a period longer than one week.

Entrance Unit Defined

The requirements for admission to the various colleges of the University are stated in terms of units.

A unit in any subject represents the amount of work that may be done in a standard high school in a year of 36 weeks, with five recitation periods per week, of not less than 40 minutes each. In courses where laboratory work is required, from two to three hours of laboratory work is considered the equivalent of one hour of recitation according to the amount of outside preparation required in connection with such work.

Graduates of accredited schools receive credit for the work certified, with the understanding, however, that no student may enter any college of the University until he has credit for 15 units, i. e., the work of a standard four-year high-school course.

Certification of Entrance Unit

Entrance units should be certified on the blank form prescribed by the University or on a similar form, so that credit values may be readily computed. These certificates should be sent to the Registrar at least two weeks before the applicant presents himself for matriculation. Failure to do this may result in vexatious delay in registration and may render the student liable for the payment of the $2 late-registration fee. After the certificate has been considered by the Committee on Entrance and the credits recorded, it becomes the property of the University and is permanently filed in the Registrar's office.

Prescribed and Elective Units

A. Fifteen units of high-school work are required for entrance to the University.

B. The following groups are required:

(1) Four units in English[2]
(2) Three units in a second subject
(3) Two units in each of two other subjects

C. The work in "A" must include the following:

For admission to all colleges and schools, 1 unit in Algebra.

For admission to the College of Agriculture, in the case of students who elect agriculture or forestry as their major field of study — 1 unit in plane geometry.

For admission to the College of Arts and Sciences, in the case of students who intend to elect mathematics, physics, chemistry, geology,

[2]A student may enter with 3 units of English, but in that case he must elect 6 hours of college English in addition to the minimum number of hours in that subject required for his degree. For this additional work he will receive college credit.

In the College of Engineering and the School of Mines the 6 hours of college English requirement will be waived if the student presents for entrance 2 units of a foreign language.

and pre-medical studies as their major field of study — 1 unit in plane geometry.

For admission to the College of Engineering — 1½ units in algebra, 1 unit in plane geometry, and ½ unit in solid geometry.

For admission to the College of Pharmacy — 1 unit in history and 1 unit in science.

D. Work in the following subjects not to exceed the number of units placed after each subject will be accepted:

Subject	*Units*
English	4
Foreign languages[4]	
Latin	4
Greek	3
French	3
German	3
Spanish	3
Italian	3
Education	2
Mathematics	
Algebra	2
Plane geometry	1
Solid geometry	½
Trigonometry	½
History and Economics[5]	
History	3
Civics	1
Economics	1
Sociology	1
Drawing	
Free-hand drawing	1
Mechanical drawing	1
Music (applied)	2

Subject	*Units*
Science[6]	
Physics	1
Chemistry	1
Biology[7]	1
Botany[7]	1
Zoology[7]	1
Geology	1
General science	1
Physical geography	1
Physiology	½
Commercial geography	½
Commercial law	½
Vocational subjects (not to exceed 4 units)	
Agriculture	4
Household arts	3
Manual training	3
Bookkeeping or bookkeeping and commercial arithmetic	2
Commercial arithmetic (alone)	½
Shorthand	1
Typewriting	1
Hygiene and sanitation	1
Physical education	1

Special Requirements for Admission

The College of Law:

The following students will be admitted:

1. Graduates of approved colleges.

2. Students who have completed at least three years of work of collegiate grade at an institution of approved standing. If such work is taken at West Virginia University, ninety-six hours of credit must be presented. Students

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[4]Not less than 2 units of one foreign language will be accepted for entrance unless sufficient additional work in that language is taken in college to complete a minimum of 2 units.

[5]A group of 3 units may be formed by combining 2 units of history with 1 unit of civics, economics, or sociology, or with ½ unit each of any two of these subjects.

[6]A group of 2 or 3 units in science may be made by combining 1 unit each of any two of the following: physics, chemistry, botany, biology, zoology, geology, general science.

[7]If a student presents either botany or zoology for entrance he may have credit for no more than ½ unit of biology; if he presents both botany and zoology, no credit in biology will be allowed.

from any institution other than West Virginia University must have credit for three-fourths of the number of hours required for graduation by such institution, but in no case less than ninety hours. Except when the applicant has a degree from an approved college, only those credits may be counted for admission to the College of Law for which West Virginia University would give credit toward a degree of Bachelor of Arts, Bachelor of Science, or Bachelor of Science in Engineering. Work taken at West Virginia University must carry a number of honor points equal to the number of hours of credit.

If a student needs no more than four hours or no more than four honor points, or no more than four hours and four honor points, in order to meet these requirements, the Scholarship Committee may, in a meritorious case, admit such student. But until these requirements have been met, law-school credit is withheld and the student is not eligible to take second-year work. A student may not make up such hours or honor points while he is carrying work in a regular session of the College of Law.

Every applicant for admission must present to the secretary of the school, prior to registration, a complete transcript of his record in each institution which he has attended after the completion of his secondary education.

Except in the case of students who have maintained a high scholastic average, each applicant is required to appear before the Committee on Admissions for advice as to the likelihood of his success in the study of law. In such interview the Committee may, as a basis for this advice, make use not only of college grades, but also of intelligence tests and legal aptitude tests.

No applicant will be admitted who previously shall have attended another law school and who shall be ineligible to return to that school in good standing.

The College of Education:

The requirements for admission to the College of Education shall be the completion of 58 semester hours of approved college work, with an average of at least 1 honor point per credit hour. Candidates for the bachelor's degree in Education register for their first two years of work in the College of Arts and Sciences. Freshmen and sophomores who expect to enter the College of Education will indicate their intention when they register. Their studies will be directed by Professor Elizabeth Stalnaker, adviser for pre-Education students. Such students should so order their courses of study as to satisfy requirements for junior standing and should be fulfilling requirements for the certification of teachers.

The School of Journalism:

A candidate seeking admission to the School of Journalism with the view of obtaining a degree must have satisfied the requirements for matriculation in one of the University undergraduate colleges and must have earned at least 60 semester hours of college credit. A student deficient in physical education and military science will be required to take these subjects as soon as possible. During his freshman and sophomore years he should have completed satisfactorily all or most courses specified for pre-journalism majors. A pre-journalism student not maintaining at least a C average during his first two years in all college subjects is strongly advised not to enroll in the professional school.

The School of Medicine:

In addition to the high-school requirements the applicant for admission to the School of Medicine must have credit for at least three years of work in a college of recognized standing. This must include 90 hours of credit exclusive of military science and physical education.

This 90 hours of credit must include the following subjects and hours: English composition, 6 hours; physics, 8 hours; biological sciences, 12 hours (mainly zoology and comparative anatomy); chemistry, 20 hours (including 6 hours organic); psychology, 3 hours; a modern foreign language, 12 hours (German or French preferred); Latin, 6 hours recommended.

Scholarship: Since only a limited number of students can be admitted. the selection is made on a basis of scholarship. All applicants must take the aptitude test approved by the Association of American Medical Colleges, the rating in which is considered in making selections. This test is given at regular intervals in all colleges giving pre-medical work.

Further details concerning entrance requirements to the School of Medicine may be obtained by writing to the Dean of the School of Medicine or the Registrar of the University. A full statement concerning suggested pre-medical courses is to be found in Part III of this Catalogue.

The School of Music:

Students who meet University entrance requirements are admitted to the School of Music either by examination or on certificate from an accredited secondary school. In case of the latter, the certificate must set forth the work of the student in detail. Students may enter the applied-music courses in the School of Music any time during the semester without credit. An examination will be given them to determine what work they are prepared to do. It is to their advantage, however, to enter at the beginning of the semester. Students will not be permitted to register for any courses in music for credit toward any degree (A.B. or B. M.), without passing an examination in solfeggio, or demonstrating to the satisfaction of the head of the department a fairly quick sense of rhythm and tune and the ability to read music of moderate difficulty. All students will be examined at least twice a year, in January and May, to determine the progress made.

Conditional Admission:

Students must make up all deficiencies before they can be classified as sophomores.

Special Students

Persons who do not desire to become candidates for a degree may, by permission of the Committee on Entrance and of the faculty or dean of the college which they desire to enter, be admitted as special students, subject to the following provisions:

1. Special students must as a rule be 21 years of age.

2. Special students must satisfy at least 9 units of the requirements for admission, including 2 units of English.

3. Every application for admission as a special student must be pre-

sented in writing to the Committee on Entrance and must set forth fully the applicant's reason, together with a detailed statement of the studies he desires to pursue.

4. Special students are subject in all respects to the usual rules relating to registration and scholarship. They may be assigned to classes for which they apply, it being understood, however, that admission to any class rests entirely with the instructor in charge, and further, that admission to any class when so granted does not necessarily imply credit for prerequisites.

5. In the School of Mines, special provisions are made for those taking strictly vocational courses.

6. In the College of Law, students with less than the academic credit required of candidates for the degree of Bachelor of Laws will be admitted as special students only if:

(a) they have credit for no less than two years of work of collegiate grade in an institution of approved standing;

(b) they are at least twenty-three years of age;

(c) there is good reason, acceptable to the Scholarship Committee, for thinking that their experience and training have specially equipped them to engage successfully in the study of law, despite the lack of the required college credits; and

(d) the number of such special students admitted each year shall not exceed ten per cent of the average number of students admitted by the College of Law as beginning regular law students during the two preceding years.

Advanced Standing

Application for advanced standing on account of work of college grade done before entrance to the University should be made to the Committee on Entrance not later than two weeks after the applicant's matriculation.

If no certificates are offered or if those offered are considered by the Committee on Entrance to be irregular or insufficient, the Committee will arrange for an examination of the applicant. Upon payment of the examination fee, the Registrar will issue an examination card to the dean of the proper college, who will sign the card and forward it to the department concerned. After the examination the head of the department will report to the Committee on Entrance the names, numbers, and credit values of the courses, if any, for which the applicant is entitled to credit.

The College of Law:

Applicants for admission to advanced standing must satisfy the ordinary requirements for admission to the first-year class, must have successfully pursued the study of law in a school which is a member of the Association of American Law Schools, and must have received credit for courses equivalent to those required of students in the College of Law. The extent of credit allowed for work done elsewhere is determined by the Scholarship Committee.

Any applicant for advanced standing may also, in the discretion of the faculty, be required to pass examinations in any or all courses presented for credit.

The School of Music:

Advanced standing in applied music is given only by examination. Persons desiring such standing should enroll at the beginning of the semester, and after they have become thoroughly familiar with the requirements for each semester's work, they may take a special examination in which they will prove their ability to meet the requirements as outlined.

The College of Pharmacy:

No student shall be permitted to complete the course in pharmacy in less than three collegiate years in a college of pharmacy, regardless of the amount of credit offered for advanced standing. This is in accordance with the bylaws of the American Association of Colleges of Pharmacy.

Credit for Correspondence Work:

Credit up to a maximum of 30 semester hours for work completed by correspondence will be accepted by the University when such work is given by accredited colleges or universities who accept this work for credit toward their own degrees and whose residence work is accepted by West Virginia University. In compliance with an order of the State Board of Education, however, credits obtained in correspondence courses will not be considered in certifying students for teachers' certificates.

Admission to the Graduate School

Applicants holding bachelors' degrees from West Virginia University or from other institutions within the State approved by the State Board of Education and authorized to confer such degrees, or from institutions without the State standardized by membership in one of the associations of colleges and secondary schools, will be admitted to the Graduate School by making formal application to the Chairman of the Graduate Council and presenting an official transcript of the credits upon which their bachelors' degrees are based. Graduates of non-approved institutions may be admitted provisionally with the understanding that any deficiencies in their undergraduate training will be removed promptly.

Application for admission to the Graduate School should be made either in person or by letter some weeks prior to the opening of the semester for which registration is desired. Blank forms may be obtained from the Chairman of the Graduate Council. The application must be in the hands of the Council at the time the student presents himself for registration for graduate courses. If the student contemplates entering upon candidacy for an advanced degree he should announce in his application his choice of a major field of study. Then he will be referred to the head of the department in which he desires to do his major study, who will assign him to an adviser.

Eligible students who wish to further their education without reference to a higher degree will be admitted to the Graduate School provided they elect graduate courses for which they can satisfy the prerequisites.

REGISTRATION

Persons who are not registered as students in the University and who are not members of its administrative or teaching staffs shall not be admitted to regular attendance in University classes.

Time and Place of Registration:

All students are expected to register on the days set apart for registration at the beginning of each semester or term of the University. Students in the College of Agriculture, Forestry, and Home Economics, the College of Arts and Sciences, the College of Education, the College of Pharmacy, the Graduate School, the School of Journalism, the School of Music, and the School of Physical Education and Athletics register in the Field House on Beechurst Avenue. Students in the College of Engineering and in the School of Mines register in Mechanical Hall; students in the College of Law register in the College of Law building; and students in the School of Medicine register in the School of Medicine building.

Registration for the first semester, 1941-42, will take place on Tuesday and Wednesday, September 16 and 17.

Immediately after completion of their registration, all students are expected to pay their fees at the office of the Financial Secretary in the Administration Building.

Freshman Week:

Freshman Week activities were inaugurated at the University in September, 1929. The days set apart for these events in 1941 are September 12 to 17. Attendance at these exercises is required of every entering freshman. A program of lectures, directions to entering students, exercises, and recreation is arranged to aid freshmen in adjusting themselves the more easily to the environment of University life. Every freshman should be on the campus and report at convocation in Reynolds Hall at 7:30 o'clock on Friday evening, September 12, 1941. Freshman Guidance programs are conducted by members of the University staff through Sphinx, honorary men's society.

During registration week all male freshmen will report at the Field House for assignment of lockers, for appointment for physical and medical examinations, and for physical achievement tests.

Freshmen women will report during registration week at Elizabeth Moore Hall for similar examinations and tests.

All freshmen are required to take such intelligence and placement tests as are made part of the Freshman Week program.

College Credit Defined:

A college credit or semester-hour represents the amount of work done in one semester (18 weeks) in one recitation hour with two preparation hours a week. From two to three hours of laboratory work are considered equivalent to one hour of recitation, according to the amount of outside work assigned in connection with the laboratory hours.

Numbering of Courses:

Courses offered in the various colleges and schools of the University are numbered so as to indicate the rank (freshman, sophomore, junior, senior, or graduate) of the students for whom they are intended. See page 81.

Adviser:

The college in which a student is enrolled shall have jurisdiction over the course of study of that student. Each student upon entering the University is assigned to an adviser, whose duty it is to assist the student in his registration, to keep a record of his work, and to report his registration and standing to the Registrar as required. The adviser approves the student's program of studies, sees that all prescribed work is taken in proper sequence, approves the selection of elective courses, and assists the student generally in planning his course of study so that he may proceed systematically and without conflicts. Changes in registration must always have the approval of the adviser. The student will look to his adviser for guidance in all matters pertaining to his work.

Maximum and Minimum Work:

The maximum and minimum number of hours per semester as well as the maximum number of hours per year for which a student may register during the regular session of the University are as follows:

	Minimum Hours per Semester	*Maximum Hours per Semester*	*Year*
Agriculture	14	20	--
Arts and Sciences	14	18	34
Education	--	18	35
Engineering and Mechanic Arts	14	20	--
Forestry	14	20	--
Home Economics	14	18	34
Journalism	14	18	36
Law	13	16	--
Medicine	17	20	--
Mines	14	20	--
Music	14	20	--
Pharmacy	14	20	--
Physical Education and Athletics	14	20	--

A student may carry courses not in excess of 6 hours' credit[1] each term of the Summer Session, but any student who, during the last semester or full summer session in residence, has earned 2½ honor points (Arts and Sciences standard) for each hour of registration may petition the Committee on Scholarship of the college concerned to take work not in excess of 8 hours. However, only 6 hours of credit shall be allowed unless the student shall maintain a general standing entitling him to 2½ honor points for each hour of registration.

A student desiring to do irregular work, more or less than the prescribed number of hours in any college, must obtain permission from the Committee on Scholarship in his college. This permission is not valid until it has been reported to the Registrar for record.

Late Registration:

No student will be permitted to register in the University after the eighteenth day of a semester or the ninth day of either term of the Summer Session, without the special permission of the dean of the college which he proposes

[1]Five hours in the College of Law.

to enter. No student registering late will be permitted to enroll for more hours of work than the number of weeks in actual attendance without the permission of the Committee on Scholarship of the college concerned.

Substitution for Required Courses:

A student who desires to substitute another course in place of any course prescribed in his curriculum or required for the degree toward which he is working, must obtain permission for such substitution from the Committee on Scholarship in his college, but there can be no substitution from group to group.

Visitors:

Students who are registered in the University may be permitted to attend classes as visitors, provided they shall have obtained the written permission of their advisers and of the instructors in the classes they desire to visit. Members of the administrative or teaching staffs, or other regular employees of the University, may be permitted to attend classes as visitors, provided they shall have obtained the written permission of the heads of their departments and of the instructors in the classes which they desire to visit.

No record shall be kept of the work and attendance of persons admitted to classes as visitors and no credit shall be given for their work in such classes.

Persons eligible to attend classes in the University as visitors may obtain the proper permission blanks from the Registrar.

Withdrawal from the University:

A student who desires to withdraw from the University must obtain a withdrawal card from the office of the Registrar. Withdrawal procedure will be explained to him when he obtains this card.

Students who withdraw from the University without permission will receive at the end of the semester a grade of "FIW" (failure because of irregular withdrawal) in each of the subjects for which they are registered and will be indefinitely suspended from the University.

Students who desire to drop part of their work may withdraw from classes in which they are enrolled with a grade of W at any time prior to the end of the second week following the date set for mid-semester reports. Withdrawal permits must be approved by the adviser and filed with the Registrar. If such withdrawal reduces the student's hours below the required minimum, the permit must be approved by the Scholarship Committee. Withdrawals after the above date will be permitted only in exceptional cases and must be approved by the Scholarship Committee of the college in which the student is registered.

Re-entry after Withdrawal:

Students required to withdraw from one college of the University because of failure in their work and permitted to transfer to another college of the University may not again register in the college in which they were originally registered without the consent of the Scholarship Committee of that College.

Return of Books to the Library:

Students must present a signed statement from the Librarian that they have returned all books and paid all the library fines incurred, before they withdraw. No student will be allowed to graduate before paying all fines and returning all Library books.

UNIVERSITY FEES AND EXPENSES

(Subject to change without notice)

Fees

All fees are due and payable at the Financial Secretary's office on the day of registration.[1] Students registering pay the following fees:

Semester Fees in the Colleges and Schools

COLLEGE OR SCHOOL	REGULAR YEAR				SUMMER SESSION				REMARKS
	Full Time[2]		Part Time[4]		Full Time[2]		Part Time[4]		
	Resident[3]	Non-resident[3]	Resident[3]	Non-resident[3]	Resident[3]	Non-resident[3]	Resident[3]	Non-resident[3]	
Agri. For., H. Ec. ...	$ 40.00*	$115.00*	$ 3.00	$ 8.00	$ 25 or $ 30†	$ 35 or $ 40†	$ 5.00	$ 7.00	*Includes Contingent fee ($30); Student Activity fee ($7); Health Service fee ($2.50); and Hospital fee (50c.) †Either term, lower figure; both terms, higher figure.
Arts and Sciences...									
Education									
Engineering									
Journalism									
Mines									
Music									
Physical Education and Athletics									
		Fees in this column include out-of state tuition.	per credit hour except in Music				per credit hour except in Music		
Pharmacy ..... (See "Special Fees in Pharmacy")	65.00*	140.00*	$ 4.00 per cred	12.50 it hour					*See above
Law	65.00*	$190.00*	$ 4.00 per credi	$ 12.50 t hour	No instruction during the summer				*See above
Medicine	$127.00*	$202.00*	$ 8.00 per cred	$ 12.50 it hour					

[1]Students who have not paid their fees before the close of office hours of the second Saturday following the opening of a semester or a summer term, shall be dropped from the rolls of the University, and the Registrar shall notify their instructors that their class cards are to be withdrawn.

[2]A full-time student is one who is registered for 10 or more semester-hours of work during each semester of the regular academic year, or for 4 or for more semester-hours of work during each term of the summer session. A full-time student during the regular academic year receives a student activity book which entitles him to admission to all out-door athletic events and, by the payment of an additional nominal amount at each event, entitles him to admission to all in-door athletic events held in the Field House. A full-time student during the regular academic year or during the summer session is entitled to free medical consultation and advice from the University physician. A moderate charge is made for room-calls, x-rays, special laboratory tests, drugs furnished by the University Pharmacy, minor operations, treatment of fractures and dislocations, and intravenous treatment.

[3]No person shall be considered eligible to register in the University as a resident student who has not been domiciled in the State of West Virginia for at least twelve consecutive months next preceding his registration. No non-resident student may establish domicil in this State, entitling him to reductions or exemptions of tuition, merely by his attendance at the University. A minor student

Special Fees

Late registration fee[5]	$ 2.00
Graduation fee[6]	10.00
Student's record fee[7]	1.00
Junior certificate	1.00
Change in registration fee (after 8th day)	1.00
Examination fee for advanced standing	3.00
Fee for examination for entrance credit, per unit	1.00
Fee for reinstatement of students dropped from the rolls	3.00
Examination fee* for candidates for graduate degrees	1.00
Student locker fee (men)	2.50
Student locker fee (women)	2.00

Special Fees in Medicine and Pharmacy

Students in colleges and schools other than the College of Pharmacy and the School of Medicine who register for courses in the College of Pharmacy or the School of Medicine shall be required to pay a fee of $4.00 per credit hour for such courses in addition to the fees charged in the colleges or schools in which they are registered.

Regularly enrolled students in the College of Pharmacy are given the privilege of enrolling without additional fees in required Pharmacy courses offered in the School of Medicine.

Regularly enrolled pre-medical students in the College of Arts and Sciences are given the privilege of registering for the following courses in the College of Pharmacy without additional charge: Pharmacy 2, Pharmacy 3, Pharmacy 9, Pharmacy 106, and Pharmacy 107.

School of Music Fees

1. Students Registered for Degrees in the School of Music:

In addition to the fees required of all full-time students (see table on page (48), resident and non-resident students registered for degrees in the School of Music pay the following fees each semester:

Voice, piano, violin, pipe organ	*Public-school music*
$35	$15

whose parents have become domiciled in West Virginia after the student's original registration in the University, will be deemed to have the domicil of his parents and be entitled to pay resident fees thereafter. Moreover, any student who has originally paid non-resident fees may become entitled to pay resident fees, if after an interim of non-attendance or otherwise he has established a valid legal domicil in this State at least twelve months prior to his re-registration in the University. In any event, the appointment of a guardian for a minor student temporarily resident in West Virginia, other than the designation of a natural guardian, shall not in and of itself operate to establish a West Virginia domicil for such student.

[4]A part-time student is one who is registered for fewer than 10 semester-hours per semester during the regular academic year; or for fewer than 4 semester-hours per term during the summer session.

[5]Charged when students register after registration dates announced in the Catalogue.

[6]The graduation fee is payable by all students at the beginning of the semester or term in which they expect to receive their degrees or diplomas.

[7]One transcript of a student's record is furnished by the Registrar without charge. This fee is charged for furnishing an additional transcript.

*For graduate students not otherwise enrolled at time of final examination.

2. SPECIAL STUDENTS REGISTERED IN THE SCHOOL OF MUSIC:

(a) Theory Courses — Special students registered in the School of Music for theory courses in music shall pay $5 per credit hour for these courses.

(b) Applied Courses — Special students registered in the School of Music for courses in applied music shall pay tuition fees in each semester as follows: for courses in voice, piano, violin, pipe organ, or band and orchestra instruments — one lesson per week, $35, two lessons, $55. For instrument classes the fee is $5 per semester. In ensemble courses the fee in accompanying is $5 per semester; in chamber music, $5 per semester.

(c) Special Work in another College or School — Special students registered in the School of Music who take special work in another college or school of the University shall pay music fees plus the regular rate per credit-hour for the work they are taking in another college or school.

3. STUDENTS REGISTERED IN OTHER SCHOOLS AND COLLEGES:

(a) Theory Courses — Students registered in other schools and colleges of the University may enroll for theory courses in the School of Music without paying additional fees.

(b) Applied Music — Students in other schools and colleges of the University who enroll for one or more courses in applied music shall pay the regular fees required in the school or college in which they are registered plus music fees as follows: for courses in voice, piano, violin, pipe-organ, or band and orchestra instruments, one lesson per week, $20; two lessons, $35.

4. PIANO, PIPE ORGAN, AND ORCHESTRAL INSTRUMENTS FOR PRACTICE:

(a) Piano for Practice — one hour a day, $6 per semester; two hours, $10; three hours, $14; four hours, $18.

(b) Pipe Organ Practice — one hour a day, $10 per semester.

(c) Orchestral Instruments — rental fee, $2.50 per semester.

Deposits

The deposits required are as follows: breakage deposit in chemistry, $5 to $10; breakage deposit in pharmacy, $10; breakage deposit in medicine, $10; military science deposit, $10.

Refunding of Fees

A student who withdraws regularly[8] from the University may arrange for a refund of fees by submitting to the Financial Secretary his original fee receipt bearing an endorsement by the Registrar stating that his withdrawal has been regular together with the unused portion of his Student Activity book. Fees will be returned in accordance with the following schedule:

	Amount of Refund
During the first and second weeks	All fees less $2.50
During the third and fourth weeks	80% of fees
During the fifth and sixth weeks	60% of fees
During the seventh and eighth weeks	40% of fees
Beginning with ninth week	No refunds allowed

[8]To withdraw regularly a student must apply to the Registrar for permission. The withdrawal permit must be approved by the student's adviser and the Dean of the College and filed in the Registrar's office.

Cost of a Year's Work

A student's text-books will cost from $20 to $40 a year, and his registration fees $80 to $254 if he is a resident; or $230 to $404 if a non-resident. Students in engineering will use drawing instruments costing from $15 to $25. The laboratory breakage deposit required ranges from $5 to $10, a part of which is usually returned at the end of the year. In military science a $10 deposit is required to cover military equipment in the custody of the student, practically all of which is returned to the student when he accounts for his equipment. Board and room may be obtained at from $225 to $325 a year. A student's washing will cost from $18 to $24 a year. Traveling expenses, clothing, and other miscellaneous items will depend largely upon the tastes and habits of the individual student. In general, however, it may be said that the legitimate cost of a nine months' term of residence at the University ranges from $450 to $800 a year.

REQUIREMENTS FOR DEGREES

Candidates for degrees shall be eligible for graduation upon the completion of the requirements, in the college or school in which they are registered, which were in effect at the time of their first registration in that college or school, provided they apply for graduation within a period of seven years from the time of their first registration. Students who fail to complete the requirements for graduation within seven years from their first registration in the college or school in which they are candidates for degrees, shall satisfy the requirements in effect at the time they apply for graduation.

All University degrees are conferred by the Board of Governors upon recommendation of the faculties of the various schools and colleges. Degrees are granted at the close of the semester or summer session in which the students complete their work.

Candidates for degrees to be conferred at the close of the second semester must be present in person to receive their degrees unless excused by the deans of their colleges.

Scholastic Standing and Honor Points

Marking System:

A—excellent (given only to students of superior ability and attainment)
B—good (given to those students who are well above the average but who are not in the highest group)
C—fair (average students)
D—poor but passing[2]
E—condition
F—failure
I—incomplete
FIW—failure because of irregular withdrawal
W—all withdrawals prior to the end of the second week following the date set for mid-semester reports.

[2]Students are permitted to re-register in any course for which a grade of D has been received. In such cases the second grade shall supersede the first and be final.

WP—withdrew passing subsequent to the end of the second week following the date set for mid-semester reports

WF—withdrew failing subsequent to the end of the second week following the date set for mid-semester reports.

Honor Points:

The quality of a student's work shall be indicated by honor points.

A tabulation, showing the number of honor points, if any, and the grades for which they are given in the various divisions of the University, follows:

Grade	A	B+	B	C+	C	D	F
All colleges, schools and divisions except the College of Law[1]	3	--	2	--	1	--	--
College of Law	5	4	3	2	1	--	--

Baccalaureate Degrees

Credits and Honor Points Required:

Less than 6 hours in an ancient or modern language will not be counted toward any University degree, diploma, or certificate unless work in the same language has been offered for entrance.

Six hours of English composition and rhetoric (English 1 and 2) are required of all candidates for the bachelor's degree in all colleges and schools of the University.

Six hours of military science and tactics are required of all freshmen and sophomore men not specifically exempt.[3]

Two hours of physical education for men, to be taken during the first year in residence, and four hours of physical education for women, to be taken during the first and second years in residence, are required for graduation, except in the case of students entering with advanced standing amounting to 58 semester hours or more, unless previous credit has been allowed.

Each baccalaureate degree is conditioned upon the completion of a specified number of semester hours of credit. For a tabular statement of the number of credit hours required for each degree, see the last column on page 53, under the caption "Classification of Students."

All divisions of the University require minimum standards of scholastic quality. These are expressed in terms of honor points. Honor points are computed only on grades earned at West Virginia University (including Potomac State School of West Virginia University) and all courses taken in this institution which are offered towards credit requirements for the degree for which the student is a candidate shall be included in the computation of honor points. The student must maintain an average of one honor point per credit hour in order to be eligible for graduation, except in the College of Law, which requires an average grade of C. The College of Education, in addition

[1]In the College of Law the sign + after the grades A, B, or C will be used to indicate differences in standing between students receiving the same letter grade. In the Graduate School, no credits are acceptable toward an advanced degree with a rank lower than C.

[3]See page 34.

to a general average of 1 honor point per credit hour in all subjects, requires an average of 1 honor point per credit hour in Education and in each teaching field.[1]

In order to be eligible for recommendation for any West Virginia high-school teaching certificate, every student in West Virginia University who desires any such certificate must have á general honor-point average of 1.0 and also an honor-point average of 1.0 in each teaching field and in Education.

In the College of Agriculture, the College of Arts and Sciences, the College of Education, the School of Music, and the School of Physical Education and Athletics, students may decrease the total number of credit hours required for graduation by doing work of superior quality. For each 8 honor points in excess of 1 honor point per credit hour, the number of credit hours required for graduation may be diminished by one. This does not, however, excuse students from courses required for the degree.

It is the student's responsibility to keep informed on his honor-point standing. This information may be obtained at any time from the dean or director of the college or division in which the student is registered.

Requirements as to Residence:

Students who come to the University from other colleges or universities are advised to make the transfer no later than the beginning of their third year and in no case will a student who matriculates in the University later than October 1 in any year be permitted to receive a degree at the next Commencement.

In special cases students who desire to leave the University at the close of their third year to enter another institution with the purpose of taking a combined course leading to two degrees or of preparing for graduate study may, upon application beforehand to the Committee on Scholarship of the college in which they are registered, be permitted to do the work of the fourth year, or a part thereof, at such other institution and to receive the bachelor's degree from the University upon the presentation of the proper credits.

Except in the College of Law, no student will be granted a bachelor's degree by this University who has not done either a total of 90 hours or the last 30 hours of his work in actual residence at the University.

No student may receive the degree of Bachelor of Laws without at least three semesters in residence at the College of Law and the successful completion of courses aggregating at least one-half of the total number of hours required for graduation.

Classification of Students:

The following table shows the number of semester-hours required for classification as second-year, third-year, and fourth-year students and for graduation, according to the curricula in the several colleges, schools, and

[1]On and after July 1, 1942, all applicants for certification will be required to present an honor-point average of 1.2 in the first and second teaching fields and in Education.

divisions. First-year students must satisfy the requirements for admission as set forth on pages 38 to 42 inclusive.

COLLEGE AND DEGREE	Hours Required to Classify As			
	Second-Year Student	Third-Year Student	Fourth-Year Student	Hours Required for Degree
ARTS AND SCIENCES				
Bachelor of Arts (A. B.)				
Regular	25	58	92	128
Pre-Medical	32	66	96	128
Combined (Medicine)[1]	32	66	96	132
Combined (Law)[2]	25	60	96	124
Bachelor of Science (B. S.)				
Business Administration	32	66	99	132
Chemistry	34	69	103	136
Combined (Medicine)[3]	32	66	96	172
AGRICULTURE, FORESTRY, AND HOME ECONOMICS				
B. S. (Bachelor of Science)	26	64	100	144
B. S. in Agriculture (B. S. Agr.)	26	64	100	144
B. S. in Forestry (B. S. F.)	30	70	110	150
B. S. in Home Economics (B. S. H. E.)	25	58	92	128
EDUCATION[4]				
B. S. in Education (B. S. Ed.)	..	58	92	128
ENGINEERING[5]				
Bachelor of Science (B. S.)	27	60	94	133
B. S. in Chem. Eng'g. (B. S. Ch. E.)	30	72	112	152
B. S. in Civil Eng'g. (B. S. C. E.)	30	72	112	152
B. S. in Elec. Eng'g. (B. S. E. E.)	30	72	112	152
B. S. in Mech. Eng'g. (B. S. M. E.)	30	72	112	152
JOURNALISM				
B. S. in Journalism (B. S. J.)	..	60	92	128
LAW				
Bachelor of Laws (LL. B.)	21	50	...	81
PHARMACY				
B. S. in Pharmacy (B. S. Phar.)				
Retail Pharmacy	30	70	108	142
Industrial Pharmacy	30	70	108	144
SCHOOL OF MINES[5]				
B. S. in Eng'g. of Mines (B. S. E. M.)	30	72	112	152
SCHOOL OF MUSIC				
Bachelor of Music (B. Mus.)	30	64	102	136
PHYSICAL EDUCATION AND ATHLETICS				
Bachelor of Science in Physical Education (B. S. P. E.)	28	58	92	128

Work Done Out of Residence:

It is the policy of the University to discourage the taking of regular residence courses in absentia. In the case of courses begun at the University and not completed because of illness or for other acceptable reasons however, permission to complete the work in absentia under the direction of the regular University instructors giving the courses may be granted by the Committee on Scholarship; but in such case credit should be given only upon a report of a

[1]Fourth year in School of Medicine.
[2]Fourth year in College of Law.
[3]Third and fourth years in School of Medicine.
[4]For the degree of Bachelor of Science in Education, at least 10 hours of the residence work must be in Education.
[5]Students matriculating with 58 or more hours of credit may graduate with 148 hours, since physical education is not required of these students.

grade of no less than "C" on final examination.

This regulation does not apply to University extension courses.

Graduate Degrees

Graduate degrees offered by the departments in the University which have been approved for graduate work are as follows:

Master of Arts (A. M.)
Master of Music (Mus. M.)
Master of Science (M. S.)
Master of Science in Chemical Engineering (M. S. Ch. E.)
Master of Science in Electrical Engineering (M. S. E. E.)
Master of Science in Civil Engineering (M. S. C. E.)
Master of Science in Mechanical Engineering (M. S. M. E.)
Master of Science in Engineering of Mines (M. S. E. M.)
Master of Science in Home Economics Education (M. S. H. E. E.)
Doctor of Philosophy (Ph. D.)

Professional Engineering Degrees

The following professional degrees are conferred upon graduates of the College of Engineering and Mechanic Arts of West Virginia University on the basis of practical experience and study in absentia, the presentation of a thesis, and an oral final examination.

Engineer of Mines (E. M.)
Mechanical Engineer (M. E.)
Chemical Engineer (Ch. E.)
Civil Engineer (C. E.)
Electrical Engineer (E. E.)

EXAMINATIONS AND REPORTS

Courses

As a rule all courses extend through one semester only.[1]

Examinations

Mid-Semester and Final Examinations:

In practically all courses offered in the University, the student receives both a preliminary or mid-semester grade and a final grade. The mid-semester standing of a student is based on the daily recitation grades and a special test given during one or more regular recitation periods. Mid-semester grades are not entered on the Registrar's records. The final grade is based on the class standing for the entire semester and on a written final examination[2] to which a special period of two or three hours is devoted. except that the manner of

[1]In the College of Law all courses extend either throughout the entire year or through one semester. No credit will be given for less than an entire course except by special order of the Committee on Scholarship. Grades given at the end of the first semester in courses extending throughout the year are merely indicative of the quality of work done by the student to that point and do not give credit for the part of the course so far pursued. Such first-semester grade may be considered in determining the final grade.

[2]See 12 percent rule under "Absences" on page 57.

determining the final grade of seniors and graduate students provisionally approved for graduation at the end of the semester or term is left with the head of the department. Any student not satisfied with his grade, however, has the right to take the examination with his class if he so desires.

Examination Periods:

Mid-semester examinations are held usually during the week of each semester immediately preceding the day of the mid-semester reports as set forth in the University Calendar. Final examinations are held during the last week of each semester of the academic year, and during the last two days of each term of the Summer Session.

Absence from Examination:

Students are required to take all regular examinations. If a student attends a course throughout the semester and is absent from examination without permission, the instructor shall count the examination as zero and report the final grade as F. If, in the opinion of the instructor, the absence of the student was for satisfactory reason, the fact will be recorded on the student's class ticket, the grade of I will be returned, and the student may, upon application to the instructor, take the examination at a later date.

Conditions and Failures:

If the final grade of a student in any course is "F" it is recorded as a "failure," and the student must take the course again if he desires to receive credit for it. If the final grade is "I" it is recorded as "incomplete." If a grade of "I" is not removed within the following semester by the satisfactory completion of the work of the course it becomes a failure unless special permission to postpone the completion of the work is obtained from the Committee on Scholarship of the college in which the student is registered. A student receiving a grade of "E" may be given a second examination in the subject in which such grade is received, provided he applies for it at the time of his registration. A grade of "E" not removed within the following semester becomes a failure unless special permission to postpone the examination is obtained from the Committee on Scholarship of the college in which the student is registered. If the final grade after a second examination is again "E" it is recorded as a "failure." No grade higher than "C" shall be reported for the removal of a condition. In the College of Law a student who has received a grade of "D" in any course is privileged, but not required, to take the next regular examination in that course in order to raise his grade to one which carries with it honor points.

Reports

Mid-semester grades are reported to students' advisers and to deans, but are not recorded in the office of the Registrar.

Final grades are reported by instructors to student's advisers and by them directly to the Registrar's office. Final grades must be in the hands of the class adviser (semester) or the Registrar (summer term)[1] within 48 hours after

[1]Final grades are reported by instructors to the Registrar at the end of each term of a Summer Session.

the closing hour of the examination. This rule also applies to the final grades of all students registered in other colleges or schools of the University who are enrolled in law courses.

The final standing of all seniors provisionally approved for graduation shall be reported by their instructors to the deans or directors of their colleges or schools, and the final standing of all graduate students provisionally approved for graduation shall be reported to the Chairman of the Graduate Council not later than the last day of recitation of the second semester. For this purpose special report cards shall be supplied by the Registrar.

A report of each student's work is made at the close of the semester or Summer Session either to the student himself or to his parents or guardians.

DISCIPLINE

The rules and regulations which students are required to observe are few, simple, and reasonable: civil and orderly conduct; punctuality and regularity in attendance upon all required exercises; reasonable diligence in the performance of the work prescribed; and abstinence from vices.

Students who do not comply with these requirements will not be allowed to remain in the University.

All matters of discipline are in charge of the Director of Student Affairs and the Committee on Discipline. No student may be expelled without the approval of the President of the University.

Absences

Each instructor shall be responsible for the attendance of students in his classes, and shall report an excessive number of absences to the dean or director of the college in which the student is registered for such action as may be deemed advisable.

Students who must be absent from class for an extended period of time shall obtain permission for such absence from the Dean of the College in which they are enrolled.

All women students who wish to be absent from Morgantown while the University is in session must obtain permission in advance from the office of the Dean of Women.

If a student's absences in any course exceed 12 percent of the total number of recitations in the course he is barred from taking the final examination unless special permission to take such examination is given him by the dean or director of the college concerned and by the instructor.

Delinquent Students

The dean or director of each college shall make suitable and effective provisions for handling delinquent students registered in his college, subject to the general regulations.

Probation and Suspension:

Any student who at the end of any semester fails to make a passing grade in courses amounting to at least half of the total number of semester hours for which he is registered at the end of the second week following the date set for mid-semester reports shall, unless restored to probationary standing, be suspended from the University for the succeeding semester, except that a freshman subject to the operation of this rule at the end of one semester in residence shall be placed on probation for the succeeding semester.

If, however, the student is enrolled in the School of Medicine, or if the failure resulted from the abandonment of any class, or from withdrawal from the University without permission, or from absence from examination without reasonable excuse, the suspension becomes indefinite.

If a student suspended by the operation of the above rule re-enters the University and again becomes subject to it, his suspension becomes indefinite.

Any student who fails to make a passing grade in courses amounting to at least half of the total number of semester hours for which he is registered, at the end of the second week following the date set for mid-semester reports, shall be placed on probation for the remainder of the semester.

The dean or director of each college shall make periodic reports of the problems arising from delinquent students to the Council of Administration.

All actions of the Committee on Scholarship and the dean or director of the college that affect the standing of a student shall be reported by the dean to the Registrar.

Duties of Instructors:

Instructors shall report the names of delinquent students to their respective advisers at the beginning of each school month except the month in which a mid-semester examination occurs and at such other times as the occasion may arise.

In the event that a student who has not been previously reported for delinquency fails in a subject, the instructor must report to the student's dean or director the reason for the failure.

No report should be made by an instructor until after a conference with the student. If the delinquency is a minor or temporary one, the instructor may await the result of his conference before reporting. Delinquency reports should include all failures to make a passing average and unsatisfactory work on the part of those who are capable of doing a higher grade of work.

All reports shall be made on special blanks and a copy of the report should be given to the student.

Duties of Advisers:

All advisers, upon the receipt of the delinquent reports, shall have conferences with the students concerned and shall endeavor to make such recommendations and adjustments as may be within their power.

If the delinquency is due to continued wilful neglect or to failure in one-half of the work for which the student is registered, the adviser shall report the case to the dean of his college, who may, at his discretion, place the student under the jurisdiction of the Committee on Scholarship, and thereafter the adviser shall carry out the orders and instructions imposed by the dean or the committee.

Duties of the Committee on Scholarship:

The Committee on Scholarship shall have authority to proceed according to its best judgment in regard to delinquent students referred to it for its consideration.

All orders of the Committee shall become effective when approved by the dean of the college.

In the exercise of its authority, the Committee shall not suspend a student during a semester except for wilful neglect and in cases where the student's class grades are so low that further class attendance would be a waste of time. No suspension shall become effective until approved by the dean of the college.

Student Marriages

If any student under the age of 21 years, who has not been previously married, intends to marry within the school year, he or she must obtain the consent of the parents[1] or guardian before such marriage shall be solemnized, in accordance with the provisions of section 8, chapter 48, revised Official Code of West Virginia, 1931.

In order to insure obedience to both the letter and the spirit of this statute and the policy of the University such student must, not less than one week before said marriage, show satisfactory evidence to the office of the Assistant to the President that the consent of the parents or guardian as required by the statute has been obtained.

In the event that such student does not make such showing to the office of the Assistant to the President, regardless of where the marriage ceremony is performed, he or she shall, from the date of such marriage, be automatically suspended, and may only be reinstated upon showing satisfactory reason to the Council of Administration why he or she failed to comply with this regulation.

Where both parties to the marriage are students and one has not complied with the above rule, both shall be suspended as provided above.

STUDENT WELFARE

Director of Student Affairs

The activities of student welfare are under the administration of the Director of Student Affairs. The Director's office is on the second floor of the Administration Building.

Dean of Women

All interests of the women students in the University are in charge of a special executive officer of the University, the Dean of Women. The Dean's office is on the main floor of Elizabeth Moore Hall.

Convocation

Convocations are held at such times as the Committee on Convocations

[1]Or of the parent living, or, if the parents be living separate and apart, of the one to whom was awarded the custody of such person.

and Public Exercises finds appropriate and desirable. Attractive programs are provided consisting of devotional exercises, addresses by distinguished speakers, and musical and other entertainment features of special merit.

Social Center for Women

On the upper Campus, opposite Reynolds Hall, is Elizabeth Moore Hall for women, completed in 1928. The building provides for social recreational, and physical education activities for women students, and was named as a memorial to Mrs. Elizabeth I. Moore. The building is so arranged that facilities for social activities constitute a separate unit.

Student Center

The University Cafeteria has been remodeled for use as a student center offering fountain service, dancing facilities, and dining accommodations for special groups on the Campus.

Student Activities

To be eligible to represent the University in public appearances, to hold a staff position on a student publication, to be a candidate for or to hold an office filled by an election conducted by the Student Council, or to be a regular member of the University band, a student in residence during the academic year 1938-39 and thereafter must have earned at least 12 semester hours of credit and 12 honor points (Arts and Sciences standard) during his or her last previous semester in residence in order to be eligible for public appearances and positions as set forth in this paragraph.

Associated Women Students:

All women students of the University are members of the Associated Women Students. The purpose of this association is to regulate all matters pertaining to the student life of its members; to further in every way a spirit of friendliness and unity among the women of the University; to increase their sense of responsibility; and to be a medium for maintaining high scholastic and social standards.

The responsibility for directing the work of the Association rests with the Executive Council, which is composed of the following members: a president, two vice-presidents, a secretary, a treasurer, and a representative from each class. These officers are elected annually by the Association.

In 1921 the Association was admitted to active membership in the Intercollegiate Association of Student Government for Women Students

Religious Foundations and Societies

Foundations:

As at most state university centers, various State and national church boards have established at West Virginia University foundations for the religious education and nurture of students. For the promotion of common ends, the foundations are grouped into an organization, with student represen-

tatives known as the Council of Religious Agencies. Individual faculty men act as advisers. The churches of Morgantown extend a warm welcome to students of all faiths. The physical plant and equipment of each church is available for social, educational, and recreational activities of students.

Newman Hall, 1481 University avenue, is the social and religious center established by the West Virginia diocese of the Roman Catholic Church for students of that and other faiths. Rev. Joseph M. Norton is the resident chaplain, and Mrs. Wm. A. Brady is house mother. Newman Hall is a beautiful building of English collegiate architecture, immediately adjacent to the Campus. It is equipped with dormitory facilities for 20 students and also includes a chapel, dining room, lounge, game room, and library.

Trinity Church, Spruce Street, is the center for student work sponsored by the Diocese of West Virginia of the Protestant Episcopal Church. This work is under the direction of the rector, Rev. Harold M. Wilson, and Frank Rowley, director of student work.

The program includes corporate student worship services, meetings of the Student Club for discussion and fellowship, and a college chapter of the Brotherhood of St. Andrew, which conducts a mission project in the territory surrounding Morgantown and sponsors a young men's Bible class at Trinity Church. The Brotherhood of St. Andrew is a world-wide organization of young men in the Anglican Communion who have dedicated themselves to the spread of Christ's Kingdom.

The Presbyterian Student Service Project represents the cooperative efforts of the National Boards of Christian Education and Home Missions of the Presbyterian Church, U. S. A., and of the Synod of West Virginia of the Presbyterian Church, U. S., to make the Christian religion a vital factor in the experiences of students and in the relationships which these students sustain while in the University; and also, through guided Christian activities in the mine camp communities surrounding Morgantown, to train among educated men and women future Christian statesmen. Mr. Alfred Lee Klaer, 304 Willey Street, is the University pastor and director; Dr. Wm. E. Brooks, 316 Allison Street, is the minister of the church.

Wesley Foundation, 503 High street, is a center for Methodist Episcopal students. There are three attractive rooms, a kitchenette, and an office. The students are organized into a working cabinet and carry forward a religious educational program consisting of worship, study, fellowship, community service, mining-camp missions, and other extension activities. Rev. Ward Harvey is assigned by the West Virginia Conference of the church as Director and University pastor.

The Hillel Foundation Extension Unit of West Virginia University represents the combined efforts of the West Virginia State B'nai B'rith Lodges and of the West Virginia State Federation of Temple Sisterhoods to bring the University's students together in religious, cultural, and social activities. The Foundation is under the direction of Rabbi Alfred Jospe, spiritual leader of the Temple Beth El in Fairmont. Prominent lecturers and speakers are featured at regular intervals by the Foundation for the members of the group and for the general student body.

Other churches, while not having special buildings and workers, carry on an important work in ministering to the religious and social needs and welfare of University students of their particular faiths as well as many of still other faiths.

Societies:

Young Women's Christian Association is a voluntary group of women in the University organized for the purpose of promoting and directing widely varied activities for a religious motive. Through its national and international organization, the Y. W. C. A. joins in fellowship with students throughout the world. Membership in the Campus organization is open to all women students in the University who are in agreement with its purpose. The Y. W. C. A. headquarters are located on the second floor of Elizabeth Moore Hall.

The University Young Men's Christian Association meets every Wednesday evening in Elizabeth Moore Hall. Dr. Samuel Morris is faculty adviser. The objectives of the association are broad and the meetings prove most helpful to the large and growing membership.

Church organizations. The following organizations have been established by Morgantown churches for the purpose of providing wholesome social activities for the students: Chi Beta Sigma—Methodist Protestant; Kappa Phi—Methodist; Westminster Girls' Club—Presbyterian; Theta Epsilon—Baptist.

Student Social Life

The social life of the students in the University is under the general supervision of the Committee on Social Affairs. This Committee has supervision of every social function given by the University or by an organization within it, including fraternities, sororities, and other student societies. Such social functions as balls, dances, picnics, excursions, and receptions are supervised by this Committee.

Physical Education and Athletics

Service Programs for Men and Women

Two hours of physical education for men, to be taken during the first year in residence; and four hours of physical education for women, to be taken during the first and second years in residence are required for graduation of students presenting fewer than 58 hours, unless previous credit has been allowed.

Each student who is required to register for physical education is given a complete medical and physical examination at the beginning of the University school year to determine his fitness for active participation in University activities of any description. See Part III for more extended information on the course offerings of these departments.

Intramural Sports

Intramural Sports for Men:

The department of intramural sports for men is organized as one of the departments of the School of Physical Education and Athletics. It is the aim of this department to encourage the entire student body of the University to

participate in organized athletic sports and wholesome, active recreation.. Competition will be promoted between student groups, faculty groups and individuals The units which are now the natural groups on the campus, such as class, fraternity, and unorganized or non-fraternity groups, will form the basis for activities in competitive sports and recreation. It is the desire of the department to foster a spirit of fair play and good sportsmanship in all competition.

All students regularly enrolled in any department in the University shall be eligible to enjoy the intramural privileges, except that they must satisfy certain eligibility requirements for the various activities. All students who are members of the Varsity or freshmen squads in a sport, or who have earned a Varsity award (WV) in a sport, shall be ineligible for intramural competition in that particular sport. All students who have won a Varsity award in a sport from another institution of college rank shall be ineligible for intramural competition in that particular sport. Winning a Varsity award in one sport such as basketball will not bar a student from participation in another intramural sport such as baseball. See Handbook of the Department of Intramural Sports.

All competitions conducted by the department are under the control of the Administrative Board composed of the Dean of the School of Physical Education and Athletics, Director of Intramural Sports, Director of the Service Program for Men, Director of Intercollegiate Athletics, Supervisor of Activities, and the senior managers. The coaches of the various Varsity sports are ex-officio members of the Administrative Board and vote on questions of eligibility or protests which concern the particular sport they may coach.

The following activities are conducted during the fall seasons: speedball, touch football, badminton, volleyball, and handball. Other activities may be promoted during this season when there is sufficient interest on the part of the student and where facilities are available. Leagues will be organized to accommodate classes, fraternities, and non-fraternity or unorganized groups.

The following activities are conducted during the winter season: basketball, indoor track, ping-pong, relays, bowling, and basketball free-throwing.

The following activities are conducted during the spring season: softball, horseshoes, and outdoor track.

Intramural Sports for Women:

The Women's Recreation Association, together with the department of service program for women of the School of Physical Education and Athletics, sponsors all the intramural athletics activities for women. It is the aim of these two groups to encourage all women students to participate in organized sports as a recreational activity. Competition takes place between the organized groups on the Campus such as sorority, dormitory, church, independent, and class groups.

All women enrolled in the University are eligible to play in any intramural tournament. The number of physical education majors permitted to play on any one team is restricted. Interclass tournaments in volleyball, basketball, and baseball are held each year for the professional students in physical education.

The following activities are conducted: during the fall season, horseshoes,

tennis, and volleyball; during the winter season, badminton, foul-throwing, swimming, basketball, bowling, and ping-pong; during the spring season, softball and archery. As the demand for more activities develops, the facilities will be increased and the program broadened.

Intercollegiate Athletics

The activities of the department of intercollegiate athletics are administered by the Director of Intercollegiate Athletics and by the Athletic Board. The board is composed of nine members: five faculty, two alumni, the Director of Intercollegiate Athletics, and one student. The Dean of the School of Physical Education and Athletics serves as the chairman of the board. Football and cross-country; basketball, boxing, wrestling, and rifle; and baseball, track, tennis, and golf teams are organized and trained each season. Matters concerning athletic eligibility are decided by the Athletic Board, and scholastic eligibility regulations are established by the faculty of the University.

The Health Service

The Student Health Service is organized to provide medical service to the students of the University as well as to supervise the health conditions of the Campus.

The offices of the University physicians are in the Infirmary building, situated immediately to the rear of the President's home. Physician's office hours during the regular session are from 9:00 a. m. to 12:00 noon daily except Sunday, and from 2:00 p. m. to 5:00 p. m. daily except Saturday and Sunday. The services of a nurse are available at the infirmary from 9:00 a. m. to 9:00 p. m. At all hours medical aid may be summoned by calling 123 on the University exchange. Rounds are made by a nurse twice daily at the dormitories.

The University Pharmacy, in the basement of Woodburn Hall, is open from 10:00 a. m. to 12:00 noon daily except Sunday and from 2:00 to 5:00 p. m. daily except Saturday and Sunday.

Student Hospital Service

Each full-time student of West Virginia University shall have added to his regular semester fees a hospital fee of fifty cents (0.50) per semester, for which he shall be furnished hospital care as hereinafter provided in either the City Hospital, Morgantown, West Virginia, or the Monongalia General Hospital, Morgantown, West Virginia, as ordered by a staff member of the Health Service of West Virginia University, subject to the approval of the Director of the Student Health Service. Students in the Summer Sessions shall not be covered by this contract.

In the event of illness or accidental injury which necessitates hospitalization, each student shall be entitled to receive hospital service in either hospital mentioned above. Hospital service shall include accommodation in a private room, meals, general nursing care, hypodermics, materials for anesthetic, use of operating room, three X-ray examinations to one illness, ailment, or injury, as ordered by the attending physician during hospitalization, routine

laboratory service as ordered by the attending physician during hospitalization, routine medicines and dressings as supplied by the hospital, plaster casts, and all routine hospital service.

Hospital service to be supplied shall not included the following:

Vaccines, serums, X-ray therapy, artificial eyes, orthopedic appliances, crutches, diagnostic dental X-ray, or basal metabolism.

Hospital care shall not be furnished in the following cases:

Injuries resulting from brawls, strikes, riots, or insurrection; wilfully self-inflicted injuries; acute venereal diseases; insanity; drug addiction; alcoholism; and pulmonary tuberculosis.

Hospital care herein provided for shall be furnished only to students who pay full fees and not to part-time students.

Students registering for the first semester of the academic year shall receive benefits from the date of registration to twelve o'clock midnight of the last day of registration for the second semester. Students registering for the second semester of the academic year shall receive benefits from the date of registration to twelve o'clock midnight of the day on which Commencement Exercises are held, or the closing day of the semester if this day is not prior to Commencement Day. In case of accidental injury or emergency illness while traveling outside the area served by the Hospital Service, and where the student of necessity shall have to be cared for in a hospital having no connection with the Hospital Service, then the Hospital Service shall allow $5.00 a day for a period not to exceed 10 days for all services received in such hospital. Students shall be eligible for hospital benefits described as above only so long as they are members in good standing of West Virginia University: i.e., should a student be dropped from the University register for any reason, his contract shall be cancelled automatically and his hospital fee forfeited.

Each student shall be entitled to an aggregate of thirty days of hospitalization during each school year, provided, however, that in case of continuing illness, if hospitalization should be begun during a given semester or term but not completed by the end of such semester or term, the student shall be entitled, in the aggregate, to the same period of hospitalization to which he would have been entitled if he had completed it during such semester or term.

Should a student remain in a hospital after having been discharged as a hospital patient by the attending physician, such student shall be responsible to the hospital for the payment of its regular charges for hospitalization after the date of such discharge, and the Hospital Service shall not be liable therefor. This however shall not prevent the student from again entering a hospital for the remainder of the thirty days as herein provided.

Should a student receive hospital service by reason of accidental injuries suffered through the fault or negligence of another party, and the expenses of such injuries be collected by suit or settlement, then said student shall reimburse the Hospital Service; or should part of the expenses of such hospital services be collected by suit or settlement on account of such injuries, then said student shall reimburse the Hospital Service to the extent that such expenses may be so collected.

Employment and Placement Service

Student Employment:

Students desiring part-time work may register with H. E. Stone, Secretary of Loans and Placement, either before arrival in Morgantown or after enrollment.

Until the successful completion of at least one semester's regular University curricular work, freshmen should not attempt outside work in self-support unless absolutely necessary. Only the exceptional student can engage in such work or activities during the first semester without danger to his scholastic status.

NYA Work:

The Secretary of Loans and Placement is also Executive Secretary of the National Youth Administration at the University. Applications for NYA employment should be made to him on forms supplied by the Government for this purpose.

The Senior and Graduate Placement Service:

The University Placement Service for non-teaching positions is in charge of H. E. Stone, Secretary of Loans and Placement. Alumni and seniors may avail themselves of this assistance in obtaining suitable positions. This bureau in the I. C. White office building registers candidates for positions, interviews registrants, analyzes the market for graduates, studies the policies and practices of employers in dealing with the college product, arranges interviews between employers and candidates, aids students in preparing for employment interviews, assists graduates in seeking promotion or change of position, and engages in research in the interest of perfecting these procedures. An extensive employer contact file has been built up. Contacts with employers have resulted in increased visits to the campus by personnel and employment representatives of various corporations each year. The Placement Service works aggressively to supplement, stimulate, and extend placement activities in the University. The various colleges and departments cooperate freely with the central placement service. Placement applications are furnished on request.

Placement Guidance:

Placement service shades off into vocational guidance at the beginning of its contact with students and into follow-up or adjustment service during later contacts. A placement guidance service is therefore maintained, including an occupations information bureau with several thousand books, booklets, leaflets, and letters on careers open to university-trained men.

The Teacher-Placement Bureau:

The College of Education, in cooperation with other units of the University, maintains a Teacher-Placement Bureau which makes available to school officials the credentials of students and alumni who are candidates for school positions. The facilities of the Bureau are available to students in both the regular and Summer Sessions. No charge is made for this service.

Blanks for registration will be furnished upon application. The regular annual enrollment in the Bureau takes place the second week in February.

While a conscientious effort is made to place all worthy applicants, no one is assured a position. General letters of recommendation are not given to candidates. Information in the files of the Bureau is regarded as confidential. The Bureau cannot undertake to furnish copies of its records to commercial or other private placement bureaus.

The Pharmacists' Register:

A pharmacists' register for the benefit of both the employer and employee has been established by the College of Pharmacy. No charge is made for services rendered.

GIFTS, SCHOLARSHIPS, AND LOAN FUNDS

Several individuals, as well as national patriotic, educational, fraternal, and religious organizations, have established scholarships, loan funds, prizes, trophies, and medals for students in the University. Very few of these are available to freshmen.

Gifts

Carnegie Corporation Music Collection—Thanks to the generosity of the Trustees of the Carnegie Corporation of New York, West Virginia University in 1936 received as a gift, designed to stimulate and develop an interest in music culturally on the part of the entire student body, a Music Collection that cost the corporation $2,500. The set includes:

An electric phonograph of special design for use in small rooms and auditoriums; approximately 900 records, chosen as an anthology of recorded music, ancient and modern, from oriental and occidental countries; an oak cabinet with approximately 75 buckram albums in which to keep the records; a duplicate set of printed 3″ x 5″ card indexes of all records in the set, classified by composers, titles, mediums, forms, etc.; bound copies of full scores, when published in miniature, also bound vocal scores of operas and oratorios, which are included for all completely recorded works in the set; lastly, a selection of about 100 books on musical subjects, historical and biographical, and works of reference.

This Music Collection is attractively housed in Elizabeth Moore Hall and its use is administered under regulations designed to make it of greatest possible value to the students of the University.

Scholarships

American Bankers Association Foundation for Education in Economics Loan Scholarships—The American Bankers Association Foundation for Education in Economics has assigned to West Virginia University three scholarships of $250 each. These scholarships will be "awarded only to deserving students of integrity, intelligence, character, competency, and aptitude, whose means of support are dependent wholly or in part on their own labor, to enable them to continue the study of courses in banking and economics in classes of junior grade or above. Scholarship of the highest rank will not be a definite requirement for a loan scholarship award; however, the Foundation desires to

encourage students who will become leaders in professional or business life and does not wish loan scholarships granted to mediocre or inferior students." The holder of one of these scholarships is eligible for one reappointment. The loan is without interest until the first day of the second January after the recipient leaves the University. Beginning on that date, interest accrues at the rate of five (5%) per cent per year, and repayment of both principal and interest in sums of no less than $10 monthly must likewise then begin.

Walter Haines South Memorial Scholarship—To perpetuate the name of her deceased brother, a graduate of the University, Mrs. Frederick J. Knutti of Morgantown has created The Walter Haines South Memorial Scholarship This scholarship, open to deserving men, involves a total of $500 per annum This fund has been placed in the hands of the West Virginia University Student Loan Fund Corporation for administration. Under the plan of operation of this fund, some one person will be selected who will receive the entire amount of this scholarship fund, without interest, while he is an undergraduate. The amount lent will be repaid over a period of four years after graduation.

The Board of Governors Scholarships in Music—One of these scholarships is to be awarded in the department of voice, one in the department of violin, and one in the department of piano. There will be both preliminary and final contests in voice, in violin, and in piano. Those eligible to take part in the contests will be West Virginia high-school seniors who give promise of becoming eligible for regular enrollment in the School of Music of West Virginia University as candidates for a degree in applied music. Each scholarship to be awarded is to consist of exemption from payment of the contingent fee ($30 each semester) for the four academic years, beginning in the autumn immediately following graduation from high school and the winning of the scholarship.

The holder of a scholarship must maintain each semester a record of achievement deemed by the Scholarship Committee of the School of Music to be worthy of continuance of the award. Preliminary and final contests will be held in Morgantown, on the campus of West Virginia University, and the dates will be announced.

Charles Irwin Travelli Scholarship—This scholarship amounts to $250 a year and permits the holding student to devote his entire time to his University course.

Victor E. Albright Scholarship—This scholarship is worth $200 per year and is to be awarded "to a boy or girl of good character, of fair health and of the White race, who was born and reared in Preston county and who graduated from a high school of Preston county in the year in which the scholarship is given."

Scholarship in Public Speaking—To the winner of first place in each of the four events (debate, oration, extempore speaking, and poetry reading) in the West Virginia Interscholastic Public Speaking Contest will be awarded a four-year scholarship in the College of Arts and Sciences of the University.

The Elizabeth Davis Richards Scholarship in English and Poetry—In memory of Elizabeth Davis Richards, well known West Virginia authoress and patron of the English Club, an annual scholarship in the amount of $150 was established by Mr. Del Roy Richards of Morgantown in December, 1936, to be awarded to some worthy upper-division or graduate student in the department of English.

The John Barton Payne Scholarship—The Hon. John Barton Payne, native of Taylor county and late president of the American Red Cross, bequeathed to the University the sum of $12,000, the income from which is to be used to aid two young men—one a native of Taylor county, the other a native of Preston county—to attend the University. Financial need and scholastic merit are prime considerations in making the award.

The Sears Roebuck Agricultural Foundation Scholarships—A grant to the College of Agriculture of $2,000 from the Sears Roebuck Agricultural Foundation of Chicago makes possible the awarding of scholarships each year to upwards of 16 needy, deserving farm boys enrolling as freshmen in agriculture. Individual scholarships amount to from $125 to $150.

The Southern States Cooperative Scholarship—Each year the most outstanding high-school student in vocational agriculture who is also a member of the West Virginia chapter, Future Farmers of America, and who matriculates in the College of Agriculture will receive a scholarship award of $100 from Southern States Cooperative, Inc.

Loan Funds

The J. D. Finley Loan Fund—A fund of $1,000 has been contributed to the University by the trustees of the estate of the Hon. J. D. Finley of Pittsburgh, Pa., in accordance with his last will and testament, to be used as loans to deserving students in the School of Medicine.

The Theodore Smith Loan Fund — On April 13, 1930, Theodore Smith was drowned in the Monongahela River. The tragic death of this student disclosed the fact that he was being financed through the University by the late Hon. James Elwood Jones. The youth had voluntarily taken out a life insurance policy of $2,000 with Mr. Jones as beneficiary. In deference to the memory of Theodore Smith, Mr. Jones turned the $2,000 over to the University for the establishment of the Theodore Smith Loan Fund to perpetuate the youth's name. Application blanks may be obtained from the secretary of Loan Funds.

The Revolving Loan Fund for Men—A revolving fund to meet financial emergencies of University men was established in October, 1931. About $1,375 was raised by public subscription for this fund. By additional contributions the principal of the fund has been increased to $1,701. H. E. Stone, founder of the fund and Secretary of Loan Funds, is treasurer. Loans are made in small amounts and for short periods of time. No loans from this fund are made until after registration.

The Baltimore and Ohio Railroad Loan Fund — A special fund for small loans to students registered in the College of Agriculture has been established by the Baltimore and Ohio Railroad. Information about this fund may be obtained from H. E. Stone, Secretary of Loan Funds, treasurer, or from Dean C. R. Orton of the College of Agriculture, Forestry, and Home Economics.

The John E. Bohan Loan Fund of the Kappa Delta Pi Educational Fraternity—This fund was established in 1935 by the Alpha Upsilon Chapter of West Virginia University, in memory of Dr. John E. Bohan, long the honored sponsor of the chapter, to foster the professional education of teachers by

making loans to students of Education who, in the judgment of the trustees of the fund, will make an early contribution to professional knowledge in Education.

The Chauncey Watson Boucher Loan Fund — Established by former President C. S. Boucher in honor of the memory of his father. The fund is for the assistance of residents of West Virginia who might find it necessary to postpone completion of their studies for the Bachelor's degree if funds were not available for the payment of the University fees for part or all of their last year. Upon recommendation of a student's dean, a loan is made without interest for two years or for a lesser period of time, by the Financial Secretary of the University during the period when fees are payable.

The Alfred Walker Loan Fund — A special fund for small loans to students registered in the College of Pharmacy has been established in honor of the memory of Mr. Alfred Walker of Sutton, West Virginia, the first president of the State Pharmaceutical Association and for many years secretary of the West Virginia Board of Pharmacy. Loans are made in small amounts and for short periods of time without interest. Additional information may be obtained from H. E. Stone, Secretary of Loan Funds, or from Dean J. Lester Hayman of the College of Pharmacy.

Other Loan Funds for Men—The Morgantown Rotary Club has established an emergency loan fund for University men. Application for loans should be made to H. E. Stone, who acts as adviser for the fund.

Several other loan funds are available for men who by their records at West Virginia University have demonstrated their ability and integrity. These include the Knights Templar, the Scottish Rite, and the Grand Lodge Funds established by Masonic bodies. Other funds include those established by church boards, religious, fraternal, and civic associations. · Information concerning these may be obtained from the Secretary of Loan Funds, H. E. Stone.

Loan Funds for Women—There are several loans available to women at West Virginia University. These have been provided by various agencies interested in higher education for women and include:

Elizabeth Ludington Hagans Chapter of the D. A. R.; Colonel John Evans Chapter of the D. A. R.; Knights Templar; West Virginia Federation of Women's Clubs; The Campus Club; The West Virginia Farm Women's Bureau; The Methodist Episcopal Church; Associated Women Students; Rhododendron; The P. E. O. Sisterhood; Pan-Hellenic Loan Fund; and national sororities.

Students should do no more borrowing than is absolutely necessary, but it is often wiser for students of good scholastic ability to borrow than to carry a burden of work so heavy as to interfere with good scholastic performance.

Loans are available in amounts varying from $50 to $400, preference being given to junior and senior students. Applications for loans may be made through the office of the Dean of Women.

PRIZES, TROPHIES, AND MEDALS (GENERAL)

Prizes

Awards for prizes in the University are made in accordance with the following rules:

No composition, in whole or in part, shall be submitted in competition for two prizes.

Only students pursuing courses leading to baccalaureate degrees are eligible for any prize offered, except for the James F. Brown prize.

No student shall be eligible to enter any contest who has not been a resident student in this University for at least one semester preceding the semester in which the contest is to be held, and who, unless he be a competitor for the James F. Brown prize, is not a resident student in good standing in the University in the semester in which the contest is held.

No successful contestant may become for a second time a competitor for the same prize.

If in any contest the judges find no manuscript of sufficient merit, there shall be no award of the prize for that year.

Students intending to compete in any essay-writing contest must notify the chairman of the Commitee on Prizes not later than March 15. Three typewritten copies of each essay must be in the hands of the chairman of the committee not later than May 15.

The conditions upon which the awards in the several contests are made may be learned upon application to the President's office, or to the members of the Committee on Prizes.

The Tax Commission Prize—The honorable members of the State Tax Commission of 1902, namely, W. P. Hubbard, Henry G. Davis, John K. Thompson, L. J. Williams, and J. H. Holt, gave the sum of $1,350 later increased by unawarded sums to $1,500, the income of which is to be used annually as a prize for the "best original work bearing on matters of taxation in West Virginia." The conditions of the competition are determined by the Council of Administration. The amount of the prize at present is $75. The subject assigned for 1941-42 is: "Intergovernmental Tax Immunity in West Virginia."

The James F. Brown Prize—The Hon. James F. Brown, an alumnus of the University, "with a desire to stimulate the young men of the State to fuller consideration of the 'inalienable right' of mankind, and especially those guaranteed by the Constitution of the State and of the United States," has contributed $5,000 to the University, the income of which is to be "used as a prize for the best essay or paper each year on the subject of the individual liberties of the citizen as guaranteed by the Constitution." The income may be given as a single prize, or it may be divided into a first and second prize. For the present the award will be made as a single prize, $200 in amount. Any regularly enrolled student in any school or college of the University or any student within one year after receiving an undergraduate degree may compete for this prize. Graduates of the College of Law or of the School of Medicine or holders of any postgraduate degree are not eligible to compete for this prize. The subject assigned

for 1941-42 is: "The Constitutionality of Federal Legislation to Prevent Unfair Election Practices."

The West Virginia State Pharmaceutical Association Prize—The West Virginia State Pharmaceutical Association offers to the student making the best set of drawings in Pharmacy 10 a two-year, paid up membership in the American Pharmaceutical Association.

The Waitman Barbe Memorial Prize—The English Club of West Virginia University offers an annual prize of $25 in memory of Waitman Barbe, poet, scholar, and adviser of the English Club during his long term of service on the Faculty. The prize shall be awarded to some student regularly enrolled as a junior or senior in West Virginia University, for creative work in the field of literature, either in prose or poetry or both. The minimum length of such composition must be 4,000 words in prose or 100 lines in poetry.

The Board of Governors Military Essay Prize—The Board of Governors of West Virginia University each year offers a prize of $50 to the cadet in the Division of Military Science and Tactics "who shall write the best essay on preparation against war."

Chi Omega Sorority Prize—The Chi Omega sorority offers an annual $15 prize to the sociology major with the highest academic ranking. All work done at West Virginia University is taken into account and no student is eligible to compete for the prize unless his junior and senior years have been spent at West Virginia University. The prize is awarded at the annual June Commencement.

Phi Lambda Upsilon Fraternity Prize—Phi Lambda Upsilon, honorary chemical fraternity, offers annually the Alexander Reed Whitehill award to the student receiving the highest grade in chemistry during the freshman year. The award consists of an engraved ornament.

The R. A. West Prize for Engineering Students—R. A. West, an alumnus of the University, because of his interest in the College of Engineering and in the young men who have been and are students there and with the further idea of promoting sound scholarship, offers a prize of $50 to the member of the graduating class of the College of Engineering in June, 1940, who has maintained the highest scholarship as measured by his honor-point average.

Tau Beta Pi, honorary Engineering fraternity, each year offers an engraved cup to the sophomore Engineer who during his freshman year maintained the highest average in his class.

The Nathan Burkan Memorial Prize—The American Society of Composers, Authors, and Publishers has established the Nathan Burkan Memorial Competition, open to the leading universities and colleges of the country that offer a course in law. A prize of $100 is available in each institution, to be awarded to the student in the graduating class in law who prepares the best paper on the subject of "Copyright Law."

Prizes in Public Speaking—In each of the four events (debate, oration, extempore speaking, and poetry reading) in the West Virginia Interscholastic Public Speaking Contest a gold medal is awarded to the winner of first place; a silver medal to the winner of second place; and a bronze medal to all other

speakers who participate in the semi-finals at the University. Each high school represented by a winner of first place is presented with a beautiful wall plaque with the escutcheon of the University mounted upon it.

The Intercollegiate Peace Association of America provides $100 in cash prizes to be awarded as follows: $50 for first prize; $30 for second prize; and $20 for third prize in the annual Intercollegiate Peace Oratorical Contest. This contest is held under the auspices of the department of public speaking of the University and each institution of higher learning in the state is entitled to send one representative.

Trophies

Alpha Epsilon Delta Prize—The Alpha of West Virginia chapter of Alpha Epsilon Delta offers each year a silver cup to the freshman pre-medical student who has made the best scholastic record for the year in chemistry and zoology.

The Inter-Fraternity Scholarship Trophy—Professor Arleigh Lee Darby of the department of Romance languages and literatures offers a silver cup known as the Inter-Fraternity Scholastic Trophy. It is awarded at the end of the University year to the fraternity having the highest average scholarship standing for that year and is to remain in the possession of that fraternity during the following year. The cup becomes the permanent property of the fraternity that first wins it five times.

The George C. Baker Trophy—The Hon. George C. Baker, graduate of the College of Law, offers a silver loving cup, possession of which is awarded each year to the Club Court in the College of Law winning the inter-club competition.

The Sport Shop Trophy—The Sports Shop of Clarksburg offers a handsome trophy to the fraternity scoring the second highest number of points in the all-year athletic competition for fraternities. This trophy becomes the permanent possession of the organization winning it once.

The Morgantown Post Trophy—The Morgantown Post, evening newspaper, offers a trophy which is symbolic of the interfraternity championship in basketball and is the permanent possession of the organization winning it once.

Pan-Hellenic Association Scholarship Cups—The Pan-Hellenic Association offers two scholarship cups. Any sorority which is a member of the Women's Pan Hellenic Council may compete for the cup, and it is awarded each year to the group having the highest average. The woman's fraternity which has maintained the highest average for three consecutive years is given permanent possession of the cup. The Pan-Hellenic Association also offers a cup each year to the pledge group which maintains the highest average.

Medals

The Lehn and Fink Medal—Through the generosity of Lehn and Fink, manufacturing chemists of New York City, the College of Pharmacy awards each year to the senior pharmacy student who, in the opinion of the Faculty of the College of Pharmacy, attains the highest scholarship, a gold medal. The medal is appropriately engraved.

MILITARY TROPHIES AND MEDALS

Trophies

The Colonel John Baker White Trophy—Colonel John Baker White, a member of the West Virginia Board of Control, has given a cup which is awarded annually to the cadet company which has attained the highest standard in military efficiency. After each award is made the cup is appropriately engraved with an inscription of the winning company and with the name of the cadet captain. A blue-and-gold streamer indicating this award is carried on the guidon of the winning company.

The Captain Roy A. Pixler Saber Award—Captain Roy A. Pixler, Air Corps Reserve, offers a saber annually to the cadet officer who is selected by a board of Regular Army officers of the Military Division as the best cadet platoon leader.

Medals

The Military Division offers a medal to: (1) the commander of the best company; (2) the leader of the best platoon. These awards are made annually at the end of military training.

The Board of Governors Military Medals—The Board of Governors of West Virginia University offers the following medals as special rewards for excellence in military training: (1) to the cadet having the best record for military training and discipline, a gold medal; (2) to the cadet having the highest record for shooting on the University Rifle Team, a gold medal; (3) to the cadet having the second-highest record for shooting on the University Rifle Team, a silver medal; (4) to the cadet on the Freshman Rifle Team with the highest aggregate score, a bronze medal.

The West Virginia Reserve Officers Association Medals—The West Virginia Reserve Officers Association offers the following medals for excellence in military training: (1) to the Basic I cadet with the highest record in all subjects of first-year military training, a gold medal; (2) to the Basic II cadet with the highest record in all subjects of second-year military training, a gold medal.

Military Division Medals—The Military Division offers a medal to the corporal and to each member of the best-drilled squad in the regiment having the highest score in the regimental squad drill competition.

Scabbard and Blade Medals—The West Virginia chapter, "C" Company, Second Regiment, of the National Society of Scabbard and Blade offers a gold, a silver, and a bronze medal to Basic I cadets for first, second, and third place in manual-of-arms competitions.

The Military Division awards medals to the Basic I students attaining the first, second, and third-highest scores in rifle marksmanship.

HONOR SOCIETIES

Phi Beta Kappa—The Alpha of West Virginia Chapter of the Phi Beta Kappa Society is established at the University. Stated meetings or public exercises of the society are held twice annually; the anniversary meeting on

December 5, and the annual meeting during Commencement Week. The honor of membership may be conferred upon candidates for the degree of Bachelor of Arts who have maintained a high scholarship rank during their college course; also, upon members of the Faculty and alumni of the University, and upon distinguished citizens of the State.

Sigma Xi—The Society of the Sigma Xi is a national honorary society devoted to the advancement of research in pure and applied science. Membership may be conferred upon faculty members and students who show outstanding ability in some field of scientific research.

Tau Beta Pi—The West Virginia Alpha chapter of the national engineering honor association of Tau Beta Pi was established in the College of Engineering in 1922. Students who rank in scholarship among the upper one-eighth of their class are eligible to election in their third year and all who rank among the upper one-fourth of the class are likewise eligible in their fourth year. These together with alumni and honorary members constitute the chapter.

Alpha Zeta—The West Virginia chapter of Alpha Zeta, the national agricultural honor fraternity, was instituted in the College of Agriculture in 1921 Sophomores and upper classmen who maintain high standing in scholarship and rank among the upper two-fifths of their respective classes are eligible to membership.

Phi Upsilon Omicron—The Lambda chapter of Phi Upsilon Omicron, one of the national professional organizations in home economics, was established at the University in November, 1923. Its purpose is to promote the moral and intellectual development of its members, to help to develop leadership, and to advance home economics. Membership is open to juniors and seniors in home economics who rank in the upper two-fifths of the class in scholarship and who meet certain personality standards.

Phi Lambda Upsilon—The Tau chapter of Phi Lambda Upsilon, national chemical honor fraternity, was established at the University in 1924. The chief object of the society is the promotion and protection of high scholarship and original investigation in all branches of pure and applied chemistry. Seniors and juniors who have attained a high standard of scholarship and character are eligible for membership.

Sigma Gamma Epsilon—Upsilon chapter was established at West Virginia University in 1927. The fraternity has for its objects the social, scholastic and scientific advancement of its members, the extension of the relations of friendship and assistance between the universities and scientific schools with recognized standing in the United States and Canada, and the upbuilding of a national college society devoted to the advancement of geology, mining, metallurgy, and ceramics. Seniors and juniors in the courses indicated, who have attained high scholarship rank, are eligible for membership.

Order of the Coif—A chapter of the Order of the Coif, a national law school honor society, was installed in 1925. Its members are selected by the Law faculty from the 10 per cent of the senior class in the College of Law ranking highest in scholarship.

Phi Epsilon Phi—Phi Epsilon Phi, botanical honor fraternity, was founded at West Virginia University in 1929. The fraternity has for its purpose the

promotion of high scholarship, the inciting of interest in botanical research, and the encouragement of professional ideals. Seniors and graduate students who are engaged in botanical work and who have attained a high standard of scholarship and character are eligible for membership in the organization.

Kappa Tau Alpha — National journalistic honor society with special emphasis on high scholarship and the best professional ideals. There are chapters in 22 universities. The West Virginia chapter was established in 1930.

Sigma Pi Sigma—Theta chapter of Sigma Pi Sigma, national physics honor society, was installed in the University in 1929. The formal statement of the objects of the society is: "To reward high scholarship and promote interest in the advanced study of physics, to stimulate individual research, and to enable its members to keep pace with the progress of science." A student elected to membership must be taking some course in physics at the time of his election. Graduate students who are taking advanced work in physics and related subjects are eligible for membership.

Kappa Delta Pi—Kappa Delta Pi, national honorary educational society, installed Alpha Upsilon chapter at West Virginia University, July 21, 1927. Election to this fraternity is conditioned upon high scholarship and desirable personal and professional qualities.

Alpha Epsilon Delta—The Alpha of West Virginia chapter of Alpha Epsilon Delta was established at West Virginia University in 1930. The chief object of the society is the promotion of high scholarship among pre-medical students. Juniors and seniors of high scholarship and character are eligible for membership.

OTHER UNIVERSITY ORGANIZATIONS

There are in the University various fraternities, sororities, societies, and clubs devoted chiefly to the social, educational, and athletic interests of the students. Some of the more important of these organizations are:

National and Greek Letter Societies

Social Fraternities

Men

Beta Theta Pi
Delta Tau Delta
Kappa Alpha
Kappa Sigma
Phi Delta Theta
Phi Kappa Psi
Phi Kappa Sigma
Phi Kappa Tau
Phi Sigma Delta
Phi Sigma Kappa
Pi Kappa Alpha
Pi Kappa Phi
Pi Lambda Phi
Sigma Chi
Sigma Nu
Sigma Phi Epsilon
Tau Kappa Epsilon
Interfraternity Council

Women

Alpha Delta Pi
Alpha Phi
Alpha Xi Delta
Chi Omega
Delta Gamma
Kappa Kappa Gamma
Phi Mu
Pi Beta Phi
Sigma Delta Tau
Pan-Hellenic Association

Professional Fraternities

Men and Women

Alpha Psi Omega (Dramatic)
Chi Sigma Delta (Economics)
Delta Phi Alpha (German)
Delta Sigma Rho (Forensic)
Eta Sigma Phi (Latin)
Kappa Delta Pi (Education)
Phi Delta Phi (Law)
Phi Alpha Delta (Law)
Phi Beta Pi (Medical)
Phi Chi (Medical)
Phi Upsilon Omicron (Home Econ.)

National and Local Organizations

Agricultural Club
Associated Women Students
Cadet Hop Association
Camera Club
Christian Youth Council
Circolo Italiano (Italian)
Dames Club
Der deutsche Verein (German)
Dolphin Club (Physical Education)
English Club
F. F. A. Club (Collegiate)
Forestry Club
Forum
Home Economics Club
International Relations Club
Journaliers (Men, Journalistic)
La Tertulia (Spanish)
Le Foyer Francais (French)
Li-Toon-Awa (Sophomore women)
Matrix (Women, Journalistic)
Men's Glee Club
Mortar Board (Senior women)
Mountain (Men)
Outing Club
Orchesis (Women, Physical Education)
Philological Society
Physical Education Club
Pre-Law Fraternity
Press Club (Journalism majors)
Public Affairs Club
Rhododendron (Junior women)
Rowan Rifles (Military)
Scabbard and Blade (Military)
Sociology Club
Speech Club
Sphinx (Senior men)
"Spiked Shoe" (Track and field)
University Band
University 4-H Club
University and Community Chorus
University and Community Orchestra
University Religious Council
University Scientific Society
Woman's Hall
  North Wing
  South Wing
Women's Recreation Association
Women's Glee Club
Women's Pan-Hellenic Association (Inter-sorority)
Student branches of the following:
  Amer. Inst. of Chemical Engineers
  Amer. Society of Civil Engineers
  Amer. Inst. of Electrical Engineers
  Amer. Society of Mechanical Engineers
  Amer. Inst. of Mining and Metallurgical Engineers

Faculty Organizations

American Association of University Professors— The West Virginia University chapter of the American Association of University Professors now has a membership of more than 40. The present officers are: S. F. Crocker, president; C. C. Williams, Jr., vice-president; Greek Sayre, secretary.

Faculty Club—The Faculty Club of the University, organized on March 10, 1921, is composed of the teaching, research, and extension staffs of the institution. The former residence of the late Dr. I. C. White, obtained by the University through the purchase of a tract of land immediately adjacent to the Campus, has been converted into a club house and residence for the Faculty Club. Meals are served to members and their guests. The Club rooms provide a center for social activities of members of the Faculty.

Campus Club—The Campus Club is purely a social organization made up of women on the University staff as well as the wives of men on the staff. The club holds meetings twice each month and special meetings and functions at other times.

Cornell Club of Morgantown—The Cornell Club of Morgantown is an alumni social organization founded in 1925. Membership is open to graduates and former students of Cornell University who live in this region and to their husbands and wives. The club holds an annual meeting and dinner and other occasional meetings at which speakers from Cornell are heard. The officers for 1940-41 are: president, H. M. Hyre; vice-president, C. F. Taylor; secretary, Mrs. T. J. Cochrane; treasurer, L. D. Hayes.

West Virginia Alumni Association of Johns Hopkins—The West Virginia Alumni Association of John Hopkins was founded in 1913 and holds annual meetings on February 22, the anniversary of the establishment of Johns Hopkins University. Graduates and former students of Johns Hopkins are eligible for membership. During 1940-41 A. M. Reese is president, and C. A. Jacobson, vice-president.

Wisconsin Alumni Club—Graduates and former students of the University of Wisconsin are eligible to membership in this organization, which holds social meetings at which speakers from that university are heard. W. A. Koehler is president of the club, organized in 1937.

PUBLICATIONS

University Publications

The following publications are issued regularly at the University:

1. *The West Virginia University Bulletin,* issued monthly during the University year. The series includes the Catalogue of the University and the Announcements of the various colleges and schools as well as occasional scholarly or scientific papers issued generally as "West Virginia University Studies".

2. The bulletins and circulars of the Agricultural Experiment Station.

3. The circulars of the Agricultural Extension Division, including the *Farm Women's Club leaflets,* the 4-H *Suggestions,* the *West Virginia Farm News* (in cooperation with the West Virginia Farm Bureau), and special pamphlets.

4. Agricultural News Service bulletins published weekly by the College of Agriculture.

5. The bulletins of the College of Engineering and Mechanic Arts and of the School of Mines.

6. *The West Virginia Law Quarterly,* the official publication of the West Virginia Bar Association, edited by the faculty of the College of Law.

7. Miscellaneous publications under the title "Philological Studies" or "Biological Studies".

8. The annual *Proceedings* of the West Virginia Academy of Science.

Student Publications

The Daily Athenaeum, University student newspaper, is published daily except Sunday and Monday by students of the School of Journalism. Heads of the editorial and business staffs are elected by the student body from candidates certified by the School of Journalism faculty and approved by the Committee on Student Publications.

The Monticola, student yearbook of the University, is usually published by the junior class. The editorial and managerial staff is elected by the student body.

The Moonshine, student humorous magazine, is published by a selected board chosen from the student body.

The Student Directory, the annual directory of the student body, is published by a selected board chosen from the student body. Profits from the sale of the Student Directory are allocated in part to the Student Loan Fund of the University.

The Freshman Handbook is published annually by a selected group of students and is distributed to each member of the entering class. It is wholly a non-profit enterprise.

The Cruiser, a professional forestry magazine, is published annually by the West Virginia University Forestry Club. The managing editor is appointed by the executive board of the club.

All student publications are under the supervision of the Committee on Student Publications.

ASSOCIATED INSTITUTIONS

The West Virginia Academy of Science

Organized in 1924 to bring about closer affiliation among the scientists of the state and to encourage the pursuit of scientific work throughout the commonwealth, the West Virginia Academy of Science is a body of nearly 300 men and women who are interested in the service of science in the development of the state. The members are widely distributed throughout the state and are representative of colleges, high schools, and industries. Annual meetings, held at the various institutions of higher learning, are divided into sections on biology, chemistry, geology and mining, mathematics and physics, and social sciences. Transactions of the annual meetings are published under the auspices of the University.

The West Virginia Geological and Economic Survey

The West Virginia Geological and Economic Survey, situated at West Virginia University, is governed by its own commission and receives separate appropriations.

One of the major purposes of the Survey is to have members of its staff, specialists in their field, investigate all the natural resources, and especially the mineral resources, of the state and to make the results of the investigations available to the public in the form of written reports and maps.

The Geological Survey was founded by an Act of the Legislature in 1897 and has functioned consistently since that date. It is recognized as one of the leading state surveys.

Accomplishments of the Survey include the complete topographic mapping of the state on 1-mile-to-the-inch quadrangles; the complete geologic mapping of the state by counties, and a state geologic map; the complete mapping of the soils of the state by counties; and the state relief map (scale 1 inch equals 4 miles).

Numerous special reports also have been made on coal, oil, gas, clays, limestones and cement, iron ores and building stone, mineral springs, manganese, deep-well records, salt brines, and forest and wood industries.

The professional staff of the Survey is composed of six geologists and four chemists. Some of the staff members of the Survey serve as part-time teachers in the department of geology of the University, and there is close cooperation between the department and the Survey.

Government of the Survey is vested in the Geological Survey Commission, composed of the governor of West Virginia, the State Treasurer, the Commissioner of Agriculture, the President of West Virginia University, and the Director of the Agricultural Experiment Station.

The West Virginia Biological Survey

The West Virginia Biological Survey is an organization of voluntary workers whose purpose is the collection of information of every kind about the plants and animals of the state.

The executive committee consists of a biologist from each of the colleges of the state with a chairman, secretary, and curator. There are no dues, and membership is open to all persons interested in the work of the Survey.

The repository for the plant and animal collections is in Science Hall, West Virginia University, Morgantown. Under the direction of the Survey a series of bibliographies dealing with the biology of the state is being published.

The Survey, in cooperation with the Carnegie Museum, Pittsburgh, Pennsylvania, during several summers has maintained one or more field collectors whose work has taken them into all parts of West Virginia. An increase in knowledge of biological conditions in the State has resulted from this work.

The State Road Commission

The Materials Laboratory of the State Road Commission is housed in Mechanical Hall of the University. Its work includes the testing of all materials used by the Commission, such as cement, aggregates, steel, bituminous materials, paints, gasolines, and oils.

Part III

Curricular Requirements and Courses of Instruction In the Colleges, Schools, and Divisions

Abbreviations

The following abbreviations are used in the announcements of courses:

I—A course given in the first semester.
II—A course given in the second semester.
I, II—A semester course given in each semester.
I and II—A course given throughout the year.
s—A course offered only in the Summer Session.
Hrs.—Number of credit hours per course.
PR—prerequisite.
†—Course omitted, 1941-42.

The Plan for Numbering Courses

For convenience each course of study is designated by the name of the department in which it is given and the number of that course. The plan of numbering is as follows:

Courses 1 to 99—courses intended primarily for freshmen and sophomores.
Courses 100 to 199—courses intended primarily for juniors and seniors.
Courses 200 to 299—advanced courses open to juniors, seniors, and graduate students.
Courses 300 to 399—Courses open to graduate students only.

Schedules

Prior to the opening of each semester, a schedule is printed announcing the courses to be offered in that semester in the College of Arts and Sciences, the College of Education, the School of Music, the School of Physical Education and Athletics, the School of Journalism, and the Division of Home Economics in the College of Agriculture, Forestry, and Home Economics. Schedules are prepared for the College of Engineering, the College of Law, the College of Agriculture, the College of Pharmacy, and the School of Medicine but are not printed. A complete schedule of all courses offered in the Summer Session is printed in the Summer Session bulletin.

The College of Agriculture, Forestry, and Home Economics

ORGANIZATION

All the agricultural, forestry, and home economics work of the University is organized under the College of Agriculture, Forestry, and Home Economics. For the purpose of administration the College is divided into three branches: viz,

I. The Agricultural Experiment Station, organized for research and experimental work.

II. Resident instruction in agriculture, in forestry, and in home economics.

III. Extension work in agriculture, home economics, and boys' and girls' club work, given by the Division of Agricultural Extension to citizens of the state who are not in residence at the College.

The work of these divisions is closely interrelated. Although some members of the staff devote full time to college instruction, research, or extension work, many others divide their time among two or three of these divisions.

The Standing Committees

STUDENTS' COURSES AND HOURS: Messrs. ORTON, PEAIRS, PARSONS, PERCIVAL; Miss NOER.

SCHOLARSHIP: Messrs. POHLMAN, PERCIVAL, Miss NESBITT.

STUDENT PLACEMENT AND FARM PRACTICE: Messrs. HENDERSON, LIVESAY, PARSONS, MARSH, and ARMENTROUT.

LIBRARY: Messrs. LEACH, DUSTMAN, ERICKSON, and CARTLEDGE; Miss PALMER.

Agricultural Experiment Station

The Agricultural Experiment Station was established in the University by the Board of Regents in 1888 by authority of an act of Congress known as the Hatch Act. Further support was given by acts of Congress known as the Adams Act, approved June 30, 1906, the Purnell Act, approved February 24, 1925, and the Bankhead-Jones Act, approved June 29, 1935. The work of the Station is supported also by State appropriations.

Investigations are being conducted by the Station in the fields of animal husbandry, animal pathology, dairy husbandry, poultry husbandry, field crops, horticulture, entomology, plant pathology, agricultural chemistry, soils, land use, water problems, farm economics, farm mechanics, forestry, and physiology and nutrition, the total number of investigations being classified into about 80 research projects.

In addition to the five farms situated at Morgantown, described elsewhere in this Catalogue,[1] branches of the Agricultural Experiment Station are maintained at Wardensville, Hardy county; Lakin, Mason county; and Kearneysville, Jefferson county.

[1]See page 29.

Experimental work is also being carried on at Lewisburg, Hillsboro, Reedsville, and elsewhere throughout the State.

Agricultural Extension

By act of the Legislature of 1913, amended in 1915, "in order to promote the improvement and advancement of agriculture, domestic science, and rural life among the people of the several counties of the State," there was "created and established in the College of Agriculture an Agricultural Extension Division to be coordinate with the resident instruction division and the Agricultural Experiment Station" of the College. This service is financed and administered with the cooperation of Federal, State, and county governments.

The work originally undertaken has been expanded subsequently to include the 4-H Club Camp for boys and girls, established at Jackson's Mill in 1921 for the purpose of teaching standards of excellence in agriculture and home economics, and the recreation center, established at Oglebay Park (Wheeling) in 1926, which has undertaken the task of developing adequate programs for improving the use of leisure time of both rural and urban citizens and for the training of community leaders.

Short Courses and Special Schools

In addition to the instruction of collegiate grade offered, the College of Agriculture maintains a series of annual short courses and special schools for the benefit of adult residents in the State who wish to obtain, in brief periods, education in certain fields. This series includes the Dairy and Ice Cream Short Course, the Horticulture Extension School, Farm and Home Week, Junior Farmers' Week, the Garden School, and the Junior Homemakers' Conference.

THE DIVISION OF AGRICULTURE

The training offered in agriculture is directed to fit the student for farm life or for the professional and business fields. Graduates may engage in farming as managers or as farm owners, in the teaching of agriculture in high schools or colleges, in extension work as county agents or specialists, in research work in experiment stations or other organizations, or in many of the recently established federal activities in aid of agriculture. They may engage in business related to farming such as dairy manufactures, meat processing, seeds and nursery stock, feeds and fertilizers, or marketing.

The curriculum leading to the degree of Bachelor of Science in Agriculture is designed to provide a broad and well-grounded training in the general field of agriculture so that the graduate may be prepared for occupations requiring such general knowledge, and may have the necessary foundation for such specialization as he may elect to pursue.

All candidates for the degree will follow a uniform curriculum for the first two years, which includes courses in the sciences that are fundamental to agriculture, together with certain specified courses in agriculture. During the third and fourth years a certain amount of selection is permitted which will enable the student to meet special requirements in various fields, such as animal industry, plant industry, dairy manufactures, and agricultural education. In the last-mentioned field he may qualify for the teacher's certificate in Vocational

Agriculture. Or the student may make the elective work broader in its scope and prepare for some phase of extension activity or for general farming; or he may choose the Agricultural Science curriculum, which will serve as a foundation for later graduate work in some scientific phase of agriculture.

For the use of the students the following laboratories are maintained in the college: agricultural chemistry, agronomy, soils, genetics, animal husbandry, animal pathology, dairy husbandry, entomology, farm economics, farm shop work, horticulture, nutrition, plant pathology, and poultry husbandry.

The Curriculum in Agricultural Science

Students who expect to do graduate work in preparation for teaching agricultural science in colleges and universities, or for research work in experiment stations, or for other work in specialized fields of basic agricultural science, should register for the Curriculum in Agricultural Science. Only those students who have a high-school record above the average and who are capable of maintaining a scholarship average of B or above should follow this curriculum. Success in graduate work will depend upon better-than-average undergraduate scholarship, and such undergraduate work must include adequate preparation in biology, mathematics, English, and foreign languages.

The Combined Degree: A. B., and B. S. in Agriculture

Students who desire a broader training than that furnished in the curriculum leading to the degree of Bachelor of Science in Agriculture are reminded that, by proper arrangement of their courses, they may obtain both degrees in five years. Such students normally will take first the degree of Bachelor of Arts in the College of Arts and Sciences, usually with major work in the field of biology. For particulars, see the **Announcements** of the College of Arts and Sciences.

The Two-Year Curriculum Leading to the Certificate in Agriculture

Students who may wish to acquire technical training in the field of scientific agriculture, but who do not care to meet all the requirements for the degree of Bachelor of Science in Agriculture, may register for the two-year curriculum leading to the Certificate in Agriculture. Requirements for entrance are to be the same as for the four-year course, namely, a high-school diploma. The first year's work is designed to give the student basic studies in some of the principal fields of Agriculture. The second year's work is more flexible, allowing the student to specialize in some field of Agriculture if he so desires.

Seventy hours of work shall be required, this work to include 6 hours of English, 2 hours of physical education, and 6 hours of military science (if not exempted). At least 45 hours of credit must be taken in the College of Agriculture. Students in this curriculum can complete their course without regard to honor points; however, no credit can be transferred to the four-year course unless the grade in each course is C or above.

Requirements for The Degree

The degree of Bachelor of Science in Agriculture may be conferred upon any student who satisfies the entrance requirements and offers 144 hours' approved credit for college courses, including all requirements set forth below.

All the courses for the first two years, and most of the courses for the third year, are definitely required for all students (except majors in vocational agriculture and in dairy manufactures). These courses are shown in the Basic Curriculum. Students who are not required to take military science must substitute elective credits. Agriculture 5, required of students deficient in farm practice, must be completed before the third year. First-year English (English 1 and 2 or their equivalent) must be completed before any upper-division courses may be pursued for credit towards the degree.

For the fourth year, the student who wishes a general education in the field of Agriculture, leading toward the bachelor's degree, is directed to the General Curriculum in Agriculture. This course is broad enough to prepare the student to serve as a county agent or for related extension work.

For those who desire more specialized training, four courses are open—animal industry, plant industry, dairy manufactures, and vocational agriculture. The vocational-agriculture course is the only curriculum which qualifies a student to obtain a teacher's certificate.

After requirements have been met, electives may be chosen, without restriction as to college or department, with the approval of the adviser or the Committee on Courses and Hours. However, the required and elective hours taken in the College of Agriculture must amount to at least 60 hours. Provision is made for upper-division students who may wish to elect certain lower-division subjects such as languages.

Students who expect to pursue graduate work in Agriculture are advised to matriculate in the Agricultural Science curriculum for their undergraduate courses. This curriculum requires that a minimum of 45 hours be taken in the College of Agriculture in at least five subject-matter divisions.

The Dean of the College of Agriculture will act as adviser for all agricultural students and will assign students to other advisers whom he may designate.

ELECTIVES

Elective work to make up the total required for graduation may be chosen from courses in the College of Agriculture or in other colleges of the University with the consent of the adviser or of the Committee on Courses and Hours. Ordinarily little restriction is placed on the choice of such electives.

Students who offer credit from other institutions shall have their offerings evaluated by the Committee on Courses and Hours, which shall have discretionary powers in the acceptance or refusal of credit to count toward graduation from the College of Agriculture.

The Basic Curriculum in Agriculture for the First Three Years

FIRST YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
English 1	3	English 2	3
Chemistry 3	4	Chemistry 4	4
Biology 1	4	Botany 4	4
Agriculture 1	2	Farm Mech. 2	2
Geology 1	3	Poultry 1	4
Phys. Ed. 1[1]	1	Phys. Ed. 2[1]	1
Mil. Sci. 1	1	Mil. Sci. 2	1
	18		19

SECOND YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Chemistry 31[2]	4	An. Husb. 1	3
Bacter. 141	4	Horticulture 1	4
Dairy Husb. 1	5	Entomology 2	4
Agronomy 1	4	Agronomy 2	3
Mil. Sci. 3	2	Zoology 3	4
	—	Mil. Sci. 4	2
	19		20

THIRD YEAR[3]

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Hort. 102	4	Agr. Econ. 102	3
An. Husb. 102	5	Physics 2 & 4	4
Economics 1	3	Electives	11
Physics 1 & 3	4		—
	16		18

FOURTH YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Electives	18	Electives	18

[1]Only 2 hours in the service program accepted toward graduation.
[2]Chemistry 136 (6 hrs.) or 233 (5 hrs.) may be substituted.
[3]In addition to the courses listed above, 2 hours in farm practice must be earned by students with insufficient farm experience. This requirement must be met before the beginning of the junior year (See Agriculture 5).

The General Curriculum in Agriculture

(following the Basic Curriculum)

REQUIRED COURSES

Subject	*Hrs.*	*Subject*	*Hrs.*
Forestry 180	2	Animal Pathology 102	3
Agr. Economics 104	3	Plant Pathology 103	3

ELECTIVE COURSES

Subject	*Hrs.*	*Subject*	*Hrs.*	*Subject*	*Hrs.*	*Subject*	*Hrs.*
Rural Org. 134	2	Poultry 103	2-3	Hort. 206	2-3	Agr. Econ. 107	2
Rural Org. 233	3	An. Path. 206	3	Hort. 139	2	Agr. Econ. 131	3
An. Husb. 167	2	Agron. 210	3	Hort. 212	2-3	Econ. Ent. 103	3
An. Husb. 162	3	Agron. 200	2-3	Dairy Husb. 222	4	Genetics 111	2-3
An. Husb. 222	3	Agron. 205	2	Dairy Husb. 107	2	Pub. Speak. 11	3
An. Husb. 138	2			D'y Husb. 123	1-2	Plt. Path. 202	5

The Curriculum for Majors in Animal Industry

(following the Basic Curriculum)

REQUIRED COURSES

(for majors in Animal, Poultry, and Dairy Husbandry)

Animal Husbandry 203	3 Hrs.	Genetics 111[4]	2 Hrs.
Animal Pathology 102	3	Agr. Economics 104	3

[4]Substitute Genetics 221 if possible.

SUGGESTED ELECTIVES

(for Animal or Poultry Husbandry majors)

Subject	*Hrs.*	*Subject*	*Hrs.*	*Subject*	*Hrs.*	*Subject*	*Hrs.*
An. Husb. 162	3	An. Husb. 143	2	An. Husb. 138	2	An. Husb. 222	3
(*or*)		(*or*)		An. Husb. 167	3	An. Path. 206	3
Poult. Husb. 103	2	Poult. Husb. 105	2	An. Husb. 169	1	Genetics 221	3
Pub. Spkg. 11	3						

SUGGESTED ELECTIVES

(for Dairy Husbandry majors)

Dairy Husbandry 123	1 or 2 Hrs.	Dairy Husbandry 107	2 or 3 Hrs.
Dairy Husbandry 221	3	Public Speaking 11	3
Dairy Husbandry 222	4		

The Curriculum for Majors in Plant Industry

(following the Basic Curriculum)

REQUIRED COURSES

(for both Agronomy and Horticulture majors)

Subject	*Hrs.*	*Subject*	*Hrs.*	*Subject*	*Hrs.*
Genetics 221	3	Agronomy 210	3	Agr. Econ. 104	3
Plant Physiology 221	4	Plant Pathology 103	3	Forestry 180	2

(Additional for Agronomy majors)

Math. 3 — 4 Hrs.; Math. 4 — 2 Hrs.; Agron. 200 — 3 Hrs.

(Additional for Horticulture majors)

Hort. 206 — 3 Hrs.; Hort. 212 or 232 — 3 Hrs.; Hort. 213 — 3 Hrs.; Hort. 209 or 233 — 3 Hrs.

ELECTIVE COURSES

(in Agronomy)

Subject	*Hrs.*	*Subject*	*Hrs.*	*Subject*	*Hrs.*
Genetics 220	3	Chemistry 106	4	Agronomy 316	3
Genetics 222	3	Agronomy 215	3	Agronomy 314	3
Botany 130	4	Agronomy 205	2		

(in Horticulture)

Horticulture 139 — 2 Hrs.; Horticulture 140 — 2 Hrs.

(in either course)

Chemistry 139 — 4 Hrs.; Chemistry 106 — 3-5 Hrs.

The Curriculum for Majors in Dairy Manufactures

(following the Basic Curriculum)

The curriculum given below is suggestive as regards subjects and may be varied by the class adviser to meet the needs of individual students, but the curriculum indicates the subjects which are usually advised for students who desire to take major work in dairy manufacturing.

THIRD YEAR				FOURTH YEAR			
First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*	*First Sem.*	*Hrs.*	*Second Sem.*	*Hrs.*
D'y Husb. 218*	3	Agr. Econ. 102	3	An. Husb. 102	5	D'y Husb. 104†	3
D'y Husb. 107	3	Physics 2 & 4	4	(*or*)		(*or*)	
(*or*)		D'y Husb. 102*	3	D'y Husb. 218*	3	D'y Husb. 102*	3
An. Husb. 102	5	(*or*)		(*and*)		D'y Husb. 204	4
Hort. 102	5	D'y Husb. 104†	3	D'y Husb. 107	3	D'y Husb. 222	4
(*or*)		Agr. Econ. 160*	2	D'y Husb. 103†	3	D'y Husb. 246*	3
D'y Husb. 103†	3	(*or*)		(*or*)		(*or*)	
(*and*)		D'y Husb. 246*	3	Hort. 102	5	Agr. Econ. 160*	2
Agr. Econ. 235	2	Electives (5 or 6)		Agr. Econ. 131	3	Electives 4 or 5	
Economics 1	3		—	Electives 2 or 4			—
Physics 1 & 3	4				—		
	—						
	18		18		18		18

SUGGESTED ELECTIVES

Mathematics 2 or 3; Economics 212 and 213; Business Administration 141 and 142; Chemistry 6 or 106.

The Curriculum for Teachers of Vocational Agriculture[5]

The State Board of Education has set up definite requirements applicable to all college graduates desiring to teach in West Virginia high schools. These requirements specify the kind and number of various sciences and agricultural courses as well as courses in professional education subjects, all of which are necessary to qualify graduates for certification. The following curriculum, which embodies such courses required for certification, is designed to prepare the qualifying student for a teaching career in the specialized field of vocational agriculture, with provision for teaching biology as a second subject. It also satisfies the requirements for the B. S. Agr. degree.

To meet state requirements for teaching vocational agriculture a total of 50 hours in agriculture is required as provided in the following curriculum.

The complete statement of the requirements for certification to teach subjects related to agriculture will be found in the announcements of the College of Education.

THIRD YEAR				FOURTH YEAR			
First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*	*First Sem.*	*Hrs.*	*Second Sem.*	*Hrs.*
An. Husb. 102	5	Agr. Econ. 102	3	Plant or Animal		Educ.	2
Hort. 102	4	Rural Org. 118	2	Pathology	3	Educ. 214	2
Econ. 1	3	Farm Mech. 153	3	Social Sci.	3	Educ. 120	2
Farm Mech. 152	2	Education	2	Education 160	3	Educ. 224	4
Educ. 106	3	English	3	Agr. Econ. 104	3	Pub. Spkg. 11	3
	—	Hist., political		Phys. Ed. 180	2	Elective	3
		sci., or geog.	3	Electives	4		—
		Educa. 109	2				
			—		—		
	17		18		18		16

*Offered in alternate years; not available in 1941-42.
†Offered in alternate years.
[5]For a list of subjects required to teach non-vocational agriculture, see the **Regulations Governing Teacher Selection, etc.**

THE BASIC CURRICULUM IN AGRICULTURAL SCIENCE

FIRST YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
English 1	3	English 2	3
Chemistry 3	4	Chemistry 4	4
Biology 1	4	Botany 4	4
Agriculture 1	2	Math. 3 or 4	4 or 2
Math. 2 or 3	3 or 4	Geology 1	3
Mil. Sci. 1	1	Mil. Sci. 2	1
Phys. Educ. 1	1	Phys. Educ. 2	1
	18 or 19		18 or 20

SECOND YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Organic chem.	4	Quantitative chem.	3
Bacter. 141	4	Zoology 3	4
Math. 4 (if not taken earlier)	2	Economics 1	3
English 13	2	Public Spk. 11	3
Mil. sci.	2	Mil. sci.	2
Elective in major field	4 to 6	Electives in major field	3 to 5
	18 to 20		18 to 20

THIRD YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Physics 1 & 3	4	Physics 3 & 4	4
*German, French, or Spanish	3	*German, French, or Spanish	3
Electives	11 to 13	Electives	11 to 13
	18 to 20		18 to 20

FOURTH YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Electives	18	Electives	18

*Take in Junior or Senior year.

NOTE:

Students must take 45 hours in the College of Agriculture in at least five subject-matter divisions.

A student may vary from the above curriculum with the approval of his adviser and of the Committee on Courses and Hours.

The student's adviser should be in the field of the student's major.

COURSES OF INSTRUCTION IN AGRICULTURE

(For explanation of abbreviations see page 81)

Agriculture

Dean Orton and Staff in Agriculture

Undergraduate Division

1. Introduction to Agriculture. I. 2 Hrs. A survey of the history and practice of the general field of agriculture with special reference to opportunities and problems in West Virginia.

Mr. Parsons, Mr. Gaar, and Staff in Agriculture

5. Summer Practice. No Hrs. A minimum of 12 weeks on an approved farm will be required of each candidate for the degree of Bachelor of Science in Agriculture who has not had the equivalent of at least one year's farm experience after reaching the age of 14 years. Must be done under the direction of the Dean and the Committee on Farm Practice and must be completed before the third year. Open only to students deficient in farm practice.

270. Senior Seminar in Agriculture. II. 1 Hr. Current problems and plans in agriculture.

Mr. Orton and Staff

280, 281. Special Topics. I and II, 2 or 3 Hrs. per semester. Special work may be provided in each of the departments for students having the needed qualifications. The consent of the respective department head is required.

Departmental Staffs

Graduate Division

380, 381, 382, 383. Research. I and II. 1 to 6 Hrs. per semester. (See description under this number in each department). Work for the degree of Master of Science consists chiefly of course offerings and no more than 6 credit hours of research, with special emphasis on a major subject to be selected from one of the several departments. Work for the degree of Doctor of Philosophy is limited to a few selected fields and will consist of research as well as the required course work.
Departmental Staffs

Agricultural Chemistry

Professor DUSTMAN

Chemistry courses for agricultural and home economics students of undergraduate rank are offered in the College of Arts and Sciences (see Chemistry). Graduate work may be pursued under the general research course outlined under Agriculture, above.

280, 281. Special Topics. I and II. 2 or 3 Hrs. per semester. Staff

380, 381, 382, 383. Research. I and II. 1 to 6 Hrs. per semester. Staff

CHEMISTRY

31, 131. Organic Chemistry. I. 4 Hrs. For students in agriculture and home economics. Chemistry 9 may accompany this course. PR: Chemistry 4, or 2 and 9. Mr. Dustman

218. Dairy Chemistry. I. 3 Hrs. Offered in 1942-43 and alternate years. PR for graduate students: Chemistry 106 or equivalent, Chemistry 31 or 233, and Dairy Husbandry 1; for undergraduates, Chem. 31. Mr. Dustman

NOTE: For description of the course in general biochemistry see the Announcements of the School of Medicine.

Agricultural Economics

Professor ARMENTROUT; Associate Professor CORNELL; Assistant Professor ABRAHAMSEN

Undergraduate Division

2, 102. Farm Economics. II. 3 Hrs. Principles of economics as applied to agriculture. Mr. Armentrout

104. Farm Management. I. 3 Hrs. Principles of choosing, equipping, and operating a farm. Mr. Cornell

107. Farm Records and Accounts. II. 2 Hrs. Mr. Armentrout

131. Marketing Agricultural Products. I. 3 Hrs. Principles and practices of marketing agricultural products. Mr. Abrahamsen

160. Dairy Accounting. II. 2 Hrs. A system of accounts which has been designed especially for the use of medium-sized dairy manufacturing plants. Offered in 1942-43 and alternate years. Mr. Armentrout

280, 281. Special Topics. I and II. 2 or 3 Hrs. per semester. Staff

230. Cooperative Marketing. I. 2 Hrs. Principles and practices of cooperative marketing as applied to the marketing of agricultural products and the purchase of farm supplies. Mr. Abrahamsen

235. Marketing Dairy Products. I. 2 Hrs. Milk-marketing practices and policies. Mr. Abrahamsen

250. Agricultural Statistics. I. 3 Hrs. Sources and methods of collecting and analyzing agricultural statistics; construction of statistical tables, charts, graphs, etc. Mr. Cornell

Graduate Division

340. **Advanced Farm Management.** I. 3 Hrs. Mr. Cornell

341. **Production Economics.** II. 3 Hrs. Advanced study of economic principles of production with special application to agriculture. Mr. Armentrout

342. **Advanced Agricultural Economics.** II. 3 Hrs. Mr. Armentrout

380, 381, 382, 383. **Research.** I and II. 1 to 6 Hrs. per semester. Staff

Agronomy and Genetics

Professor Pohlman; Associate Professor Wellhausen; Assistant Professors Cartledge and Tyner; Instructors Weibel and Broadfoot

AGRONOMY

Undergraduate Division

1. **Farm Crops.** I. 4 Hrs. Cereal, forage, and pasture crops. PR: Botany 2. Mr. Weibel

2, 102. **Soils.** II. 3 Hrs. The properties of soils. PR: Geology 4 and Chemistry 31. Mr. Pohlman and Mr. Broadfoot

10. **Forest Soils.** II. 3 Hrs. Properties of soils in relation to forestry. PR: Geology 1 and Chemistry 4. Mr. Pohlman and Mr. Broadfoot

200. **Advanced Crops.** II. 2 or 3 Hrs. Production, classification, and market grading with particular emphasis on forage crops. PR: Agronomy 1. Mr. Wellhausen

205. **Soil Conservation.** I. 2 Hrs. Causes of soil erosion and methods for its control. One or two half-day field trips will be made during the semester. PR: Agronomy 2 or 10. Mr. Tyner

210. **Fertilizers and Soil Fertility.** II. 3 Hrs. Soil fertility; theories and practices in use of fertilizer. PR: Agronomy 2. Mr. Pohlman

215. **Development and Classification of Soils.** I. 3 Hrs. Morphology, genesis, and classification of soils, Soil survey methods, mapping of an assigned area, and characteristics of some important soil series of West Virginia and the United States: PR: Agronomy 2 or 10. Mr. Tyner

280, 281. **Special Topics.** I and II. 2 to 3 Hrs. per semester. Staff

Graduate Division

316. **Soil Chemistry.** I. 3 Hrs. Fundamental chemical properties of soils in relation to plant growth; nature and properties of soil colloids; base exchange and soil acidity; availability of plant food elements and soil-plant interrelationships. Offered in 1941-42 and alternate years. Mr. Tyner

350, 351. **Seminar.** I and II. 1 Hr. per semester. Recent literature pertaining to soils and crop production. Staff

380, 381, 382, 383. **Research.** I and II. 1 to 6 Hrs. per semester. Staff

BACTERIOLOGY

314. **Soil Microbiology.** I. 3 Hrs. Occurrence of micro-organisms in soils and their relationship to decomposition of organic matter, availability of plant nutrients, and soil acidity; technique of isolation and study. Offered in 1941-42 and alternate years. Mr. Pohlman and Mr. Marten

GENETICS

Undergraduate Division

11, 111. **Elementary Genetics.** I, II. 2 Hrs. Elementary study of the principles of heredity. Mr. Cartledge

112. **Genetics Laboratory.** I, II. 1 Hr. Breeding experiments. Mr. Cartledge

220. **Crop Breeding.** II. 3 Hrs. Methods and basic scientific principles involved in the improvement of leading cereal and forage crops through hybridization and selection. PR: Genetics 111 or 221. Mr. Wellhausen

221. **Genetics.** I. 3 Hrs. Fundamental principles of inheritance. Mr. Cartledge

222. **Advanced Genetics.** II. 3 Hrs. PR: Genetics 221. Mr. Cartledge

250, 251. **Seminar.** I and II. 1 Hr. per semester. Recent literature pertaining to breeding, genetics, and cytology. Staff

280, 281. **Special Topics.** I and II. 2 to 3 Hrs. per semester Staff

Graduate Division

332. **Biometry.** II. 3 Hrs. Statistical analysis of biological data. Offered in 1941-42 and alternate years. Mr. Wellhausen

380, 381, 382, 383. **Research.** I and II. 1 to 6 Hrs. per semester. Staff

Animal Husbandry

Professor LIVESAY; Associate Professors RIETZ, SCHNEIDER, and WILSON; Assistant Professor WIGHTMAN; Instructors BUCHANAN and RUNNELS

ANIMAL HUSBANDRY

Undergraduate Division

1. **Animal Nutrition.*** II. 3 Hrs. Digestion and metabolism of food nutrients, nutrient requirements of farm animals, and nutritive values of feeds and rations. PR: Chemistry 31. Mr. Schneider

102. **Livestock Production and Management.*** I. 5 Hrs. Market types, breeds, production, and management of beef cattle, hogs, and horses. Mr. Livesay, Mr. Buchanan, and Mr. Schneider

138. **Livestock Grading and Selection.** II. 2 Hrs. Mr. Buchanan

143. **Advanced Livestock Judging.** I. 2 Hrs. Students taking this course will be required to participate in a tour of inspection of representative flocks, herds, and studs. Staff

162. **Mutton and Wool Production.** II. 3 Hrs. Mr. Wilson

166. **Meats.** II. 2 Hrs. Lectures and demonstrations on the identification, selection, and nutritive value of meat cuts. Primarily for home economics students. Mr. Buchanan

167. **Meats.** I. 2 Hrs. Farm butchering, curing, and care of meats. Visit to one of the large packing houses of Pittsburgh required of all students taking this course. Mr. Buchanan

169. **Meat Judging.** I. 1 Hr. Mr. Buchanan

203. **Advanced Animal Nutrition.** I. 3 Hrs. The chemistry of feeding stuffs and of the animal body, as well as of the digestion and metabolism of food nutrients. Mr. Schneider

222. **Breeding Farm Animals.** II. 3 Hrs. Physiology of reproduction; inheritance; selection, care, and management of breeding animals. PR: Genetics 111 or 221. Mr. Livesay

235, 236. **Current Literature.** I and II. 1 Hr. per semester. Staff

280, 281. **Special Topics.** I, II. S. 2 or 3 Hrs. per semester. Advanced studies in various phases of animal husbandry or poultry husbandry: animal genetics; energy metabolism; protein metabolism; vitamin studies; parasitology. Staff

*Animal Husbandry 1 and 102 are prerequisite to all courses in the department, including animal pathology courses.

Graduate Division

370. **Methods of Animal Husbandry Research.** I, II, S. 3 Hrs. A study of research methods which are being used in conducting experimental work in animal husbandry. Staff

380, 381, 382, 383. **Research.** I and II. 1 to 6 Hrs. per semester. Available to students in all divisions of animal husbandry. Staff

ANIMAL PATHOLOGY

102. **Animal Pathology.** I. 3 Hrs. PR: General zoology. Mr. Rietz

206. **Parasites and Pathology.** II. 3 Hrs. PR: Invertebrate zoology; for non-agricultural students, consent of instructor. Mr. Rietz

POULTRY HUSBANDRY

1. **Poultry Husbandry.** II. 4 Hrs. Prerequisite to all other poultry courses. Mr. Wightman and Mr. Runnels

103. **Poultry Management.** I. 2 Hrs. Factors in poultry production and management as related to scientific investigations. Mr. Wightman

105. **Poultry Judging.** I. 2 Hrs. Practice in the selection of birds for both standard and production qualities. Mr. Wightman

Dairy Husbandry

Professor HENDERSON; Associate Professor BOWLING; Assistant Professor BROWN; Instructor MANUS

Undergraduate Division

1. **Principles of Dairying.** I. 5 Hrs. Prerequisite to all other courses in the department except Dairy Husbandry 107. Mr. Henderson, Mr. Manus, and Mr. Brown

102. **Ice Cream and Refrigeration.** II. 3 Hrs. Offered in 1942-43 and alternate years. Manufacture of ice cream; principles of refrigeration involved in the manufacture and storage of dairy products. Mr. Manus

103. **Market Milk.** I. 3 Hrs. Offered in 1941-42 and alternate years. Market milk and the manufacture of dry and condensed milk. Mr. Brown

104. **Butter and Cheese.** II. 3 Hrs. Offered in 1941-42 and alternate years. Manufacture of butter and various types of cheese. Mr. Manus

107. **Milk and Public Health.** I. 2 or 3 Hrs. Mr. Henderson and Mr. Manus

123. **Dairy Judging.** II. 1 or 2 Hrs. Mr. Bowling and Mr. Brown

204 **Dairy Technology.** II. 4 Hrs. Chemical and bacteriological methods used in the technical control of milk and milk products. Mr. Brown

221. **Dairy Cattle.** I. 3 Hrs. History of breeds and families of registered dairy cattle. Organization and activities of breed associations. Mr. Bowling

222. **Milk Production.** II 4 Hrs. Feeding and management of dairy cattle. Mr. Henderson

280, 281. **Special Topics** I and II. 2 or 3 Hrs. per semester. Staff

Graduate Division

380, 381, 382, 383. **Research.** I and II. 1 to 6 Hrs. per semester. Staff

BACTERIOLOGY

246. **Dairy Bacteriology.** II. 3 Hrs. See under "Bacteriology," page 95.

CHEMISTRY

218. **Dairy Chemistry.** I. 3 Hrs. See under "Chemistry," page 90.

Entomology

Professor PEAIRS

2, 102. **Entomology.** II. 4 Hrs. Biological, morphological, taxonomic, and economic phases of the study of insects. PR: Invertebrate zoology. Mr. Peairs

103. **Economic Entomology.** I. 2 Hrs. Standard practices in insect control; methods for study of injurious insects. Professional requirements in entomology. PR: Ent. 2 or equivalent. Mr. Peairs

152. **Forest Entomology.** I. 4 or 2 Hrs. Insects of importance to the forester; recognition and control of insect pests in the forest. Students who have credit for Entomology 2 (102) may receive only two hours' credit in this course. Mr. Peairs

201. **Survey of Applied Entomology.** I. 3 to 5 Hrs. Principles underlying the control of insects; cultural, biological, and chemical. Practice in biological and control investigations. Prerequisite for graduate credit: 20 hours in the field of biology. Not open to students who have credit in Ent. 102. Mr. Peairs

204, 205. **Taxonomy.** I, II, S. 2 or 3 Hrs. per semester. Studies in the families and genera of insects of the region; detailed studies in restricted groups for qualified students. Mr. Peairs

280, 281. **Special Topics.** I, II, S. 2 or 3 Hrs. per semester. Advanced studies in the field of interest of the student. The following are available: life history studies; response of insects to climatic variables; insect toxicology; injurious insects. Mr. Peairs

Graduate Division

370. **Methods of Entomological Research.** I, II. 3 Hrs. A study of methods which have been proposed and used for the solution of problems arising in the study of insect biology Mr. Peairs

380, 381, 382, 383. **Research** I and II. 1 to 6 Hrs. per semester Staff

Horticulture

Professor MARSH; Associate Professor WESTOVER; Assistant Professor CHILDS; Instructors DUIS, DYE, and CONKLE

Undergraduate Division

1. **Principles of Horticulture.** II. 4 Hrs. Vegetable production. Prerequisite to all courses in olericulture. Mr. Westover and Mr. Conkle

102. **Principles of Horticulture.** I. 4 Hrs. Fruit production and ornamental horticulture. Prerequisite to all courses in pomology. Mr. Marsh and Mr. Childs

115. **Judging and Identification of Apple Varieties.** I. 1 Hr. Two laboratory periods first half of semester. Mr. Childs

139. **Landscape Gardening.** I. 2 Hrs. Theory and practice of landscape design with special application to home grounds. Mr. Dye

140. **Plant Materials.** II. 2 Hrs. Important woody and herbaceous plants used in landscape gardening. Inspection trip required. Mr. Dye

206. **Small-Fruits Production.** II. 2 or 3 Hrs. A practical and scientific study of standard cultural practices in the small-fruit plantation. Mr. Childs

209. **Systematic Pomology.** I. 3 Hrs. History, botany, and classification of fruits. Offered in 1941-42 and alternate years. Mr. Marsh and Mr. Duis

212. **Commercial Tree-Fruit Production.** II. 2 or 3 Hrs. Latest methods in pruning, spraying, soil culture, and other production practices for fruit trees from the practical and scientific standpoint. Mr. Marsh and Mr. Duis

213. **Harvesting, Packing, and Storage of Fruits.** I. 3 Hrs. Instruction in maturity standards for harvesting, grading according to national and state standards, and planning and management of packing houses and storages. Inspection trip required. Mr. Marsh and Mr. Childs

214. **Horticultural Literature.** I. 1 Hr. Instruction in approved methods for making a literature survey of horticultural topics selected by student. Discussion of relation between careful literature review and experimental project, also lectures on modern research methods in horticulture. Mr. Westover and Mr. Sudds

232. **Commercial Vegetable Production.** II. 2 Hrs. Current methods of commercial vegetable crop production including equipment, soil and climatic adaptation, plant raising, soil culture. harvesting, grading, and packing. Inspection trip required. Mr. Westover and Mr. Conkle

233. **Systematic Olericulture.** I. 3 Hrs. History, botany, and classification of vegetable crops. Offered in 1942-43 and alternate years. Mr. Westover and Mr. Conkle

280, 281. **Special Topics.** I and II. 2 or 3 Hrs. per semester Staff

Graduate Division

380, 381, 382, 383. **Research.** I and II. 1 to 6 Hrs. per semester. Staff

Plant Pathology and Bacteriology

Professors LEACH and LEONIAN; Assistant Professors MARTEN and TAYLOR; Instructor CLULO

BACTERIOLOGY

Undergraduate Division

41, 141. **General Bacteriology.** I, II. 4 Hrs. (3 Hrs. for Engineering students). PR: Chemistry 1 or 2. Mr. Marten

246. **Dairy Bacteriology.** II. 3 Hrs. The role of micro-organisms in market milk, in the manufacture of butter, cheese, and fermented milk, and in milk hygiene; practice in the preparation of media; making bacterial counts in milk. PR: Bacteriology 141. Offered in 1942-43 and alternate years. Mr. Marten

248. **Bacteriological Water Analysis.** II. 2 Hrs. Standard bacteriological methods used in the routine examination of water and sewage. PR: Bacteriology 141. Offered in 1941-42 and alternate years. Mr. Marten

280, 281. **Special Topics.** I, II. 2 to 3 Hrs. per semester. Mr. Marten

Graduate Division

314. **Soil Microbiology.** II. 3 Hrs. Occurrence of microorganisms in soils and their relationship to decomposition of organic matter, availability of plant nutrients, and soil acidity; technique of isolation and study. Offered in 1941-42 and alternate years. Mr. Marten

BIOLOGY

Undergraduate Division

210. **Cytology.** I. 4 Hrs. The fundamentals of cell structure and inclusions in plants and animals with special attention to nuclear divisions. Mr. Leach and Miss Clulo

280, 281. **Special Topics.** I, II. 2 to 4 Hrs. per semester. Staff

Graduate Division

350, 351, 352, 353. **Seminar** I, II. 1 Hr. per semester. (4 Hrs. maximum). Mr. Leach, Mr. Cartledge, Mr. Reese, and Mr. Strausbaugh

PLANT PATHOLOGY

Undergraduate Division

103. **Economic Plant Pathology.** I. 3 Hrs. The important diseases of field, garden, and orchard crops; their causes and methods of control.
Mr. Leach and Mr. Taylor

153. **Forest Pathology.** II. 4 Hrs. The important diseases of forest and shade trees; their causes and methods of control. PR: Botany 2.
Mr. Leach and Miss Clulo

202. **General Plant Pathology.** II. 5 Hrs. Nature of diseases in plants, with practice in laboratory methods. PR: Bacteriology 141.
Mr. Leach, Miss Clulo, and Staff

212. **Pathological Anatomy.** I. 3 Hrs. A study of the abnormal tissue changes in plants. Offered in 1942-43 and alternate years.
Mr. Leach and Miss Clulo

213. **Insect Transmission of Plant Diseases.** I. 3 Hrs. The role of insects in the spread and development of plant diseases and the relationship of insects to plant-disease control. PR: Plant Pathology 103 or Entomology 102. Offered in 1941-42 and alternate years. Mr. Leach

280, 281. **Special Topics.** I, II. 2 to 4 Hrs. per semester. Staff

Graduate Division

303. **Mycology.** I. 4 Hrs. Lectures, field and laboratory studies of the parasitic and saprophytic fungi. Mr. Leonian and Mr. Leach

380, 381, 382, 383. **Research.** I, II. 1 to 6 Hrs. Mr. Leach and Staff

Rural Organization

Professor PARSONS; Assistant Professor GAAR; Instructor LONGHOUSE

RURAL ORGANIZATION

118. **Organizations and Clubs for Farm Boys.** II. 2 Hrs. Problems involved in directing the activities of F.F.A., 4-H clubs, and similar organizations.
Mr. Parsons or Mr. Gaar

134. **Methods of Agricultural Extension.** I. 2 Hrs. Activities of the county agricultural and home demonstration agents and of the agricultural extension program of West Virginia. Offered in 1940-41 and alternate years. Mr. Parsons

*160. **Education—Materials and Methods of High-School Teaching of Vocational Agriculture.** I, II. 3 Hrs. Organization and preparation for teaching vocational agriculture in the high school.
Mr. Parsons and Mr. Gaar

*224. **Education.** Student Teaching in Vocational Agriculture. I, II. 4 Hrs.
Mr. Parsons and Mr. Gaar

FARM MECHANICS

Mr. LONGHOUSE

2. **Farm Shop.** II. 2 Hrs. Instruction in woodworking, cold-metal working, forge work, sheet-iron working, shaping and tempering tools, tool-fitting, harness repair, rope work, and saw conditioning.

152. **Farm Shop.** I. 2 Hrs. The place of farm shop on the farm. Construction and repair problems including carpentry, metal working, forging, fitting tools, repairing harness, and filing saws. Not open to students who have had Farm Shop 2.

*See the bulletin, **Regulations Governing Teacher Selection, etc.** for additional requirements for certification to teach vocational agriculture.

153. **Farm Machinery.** II. 3 Hrs. Principles underlying the construction, adjustment, care, and repair of farm machinery. This will include tillage, harvesting, and seeding machinery. PR: Courses 2 or 152. May be taken concurrently.

159. **Farm Structures and Sanitation.** II. 3 Hrs. A study of the layout and structure of farm buildings; types of water systems and methods of water disposal in the home and on the farm.

170. **Rural Electrification.** I. 3 Hrs. Fundamentals of electricity and its application in the home and on the farm. Open to Agriculture students only, or instructor's permission to register.

252. **Advanced Farm Mechanics.** I. 3 Hrs. Forging, cold-iron work, tool-fitting, woodworking; offers training for teaching shopwork in rural high schools. PR: Farm Mechanics 2 or 152.

The following courses are recommended for Agriculture students who wish to choose additional electives in Engineering:

C.E. 5. Land Surveying. I. 4 Hrs. PR: Mathematics 10.

M.E. 7. Welding and Heat Treatment. I, II. 1 Hr.

M.E. 20. Mechanical Drawing. I, II. 3 Hrs.

GENERAL

280, 281. **Special Problems.** I, II. 2 to 3 Hrs. per semester. PR: adequate ability and training for the work proposed and permission to register. Staff

380, 381. **Research.** I, II. 1 to 6 Hrs. per semester. Staff

THE DIVISION OF FORESTRY

The professional forester's work includes such diversified activities as timber production, logging, surveying, park management, forest protection, forest-stand improvement, flood control, watershed protection, soil-erosion control, submarginal land development, restoration of game, stream development, and construction of public camps and summer home sites. The wide scope of the modern field of forestry demands a thorough basic training for the professional forester. This accounts for the large number of required courses in the professional forestry curriculum. If a forester wishes to specialize in any one branch of the field, graduate work is needed.

The course leading to the degree of Bachelor of Science in Forestry is designed to train the student for a professional forestry career in either public or private forestry work. Graduates should be equipped to hold positions with the U. S. Forest Service, with the Forestry Division of the U. S. Indian Service, with the Soil Conservation Service, with the National Park Service, and with other federal agencies employing professional foresters; with the various state forestry departments; and with those private forest land owners—both corporate and individual—who employ technical foresters.

The curriculum includes a two years' broad foundational study of the natural, mathematical, and social sciences basic to the field, followed in the junior and senior years by more detailed study of forestry principles and technique. Many of the courses in the curriculum provide for field laboratories enabling the student to see first-hand applications of the principles presented in the classroom and to experiment with the various techniques he is learning.

An important part of the course is the ten weeks' forestry camp attended at the end of the sophomore year. At this camp the student is instructed in the field practice of land surveying and forest measurements and has opportunity to observe various forest operations on both public and private lands. Courses are offered also in game management and in other phases of the recreational use of public and private lands.

The Curriculum in Professional Forestry

FIRST YEAR				SECOND YEAR			
First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*	*First Sem.*	*Hrs.*	*Second Sem*	*Hrs.*
Biol. 1	4	Bot. 2	4	Agron. 10	3	Bot. 30	4
Chem. 3	4	Chem. 4	4	Bot. 21	4	C. E. 6	2
Eng. 1	3	Eng. 2	3	C. E. 5	4	For. 4	3
For. 1	0	For. 2	0	Econ. 1	3	For. 11	3
Geol. 1	3	Math. 10	3	For. 3	3	For. 21	4
Math. 2	3	Mil. Sci. 2	1	Mil. Sci. 3	2	Mil. Sci. 4	2
Mil. Sci. 1	1	Zool. 2	4		—	Phys. Ed. 2	1
Phys. Ed. 1	1		—				—
	—				—		19
	19		19		19		

Forestry 100S — Junior Forestry Camp — 10 Weeks — 6 Hours

THIRD YEAR				FOURTH YEAR			
First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*	*First Sem.*	*Hrs.*	*Second Sem.*	*Hrs.*
For. 112	4	For. 113	3	Entom. 152	4	For. 134	2
For. 114	3	For. 122	3	For. 123	5	For. 135	3
For. 131	3	For. 125	3	For. 124	3	For. 142	3
For. 151	2	For. 132	3	For. 133	3	Pl. Path 153	4
Phys. 1 & 3	4	For. 141	3	Elective	2	Electives	3
Elective	2	Electives	3				
	—		—		—		—
	18		18		17		15

Summer Employment by Forest-Using Agency

COURSES OF INSTRUCTION IN FORESTRY

Professor PERCIVAL; Associate Professor BESLEY; Assistant Professors BROOKS, ERICKSON, and HOLSOE

(For explanation of abbreviations see page 81)

1, 2. **The Profession of Forestry.** I and II. (No credit.) Survey of the profession of forestry and of the opportunities available to trained men. Required of all freshmen in forestry. Mr. Percival

3. **Dendrology.** I. 3 Hrs. Classification, identification, and distribution of the timber trees of the United States. PR: Botany 2. Mr. Core

4. **Dendrology.** II. 3 Hrs. Continuation of Forestry 3. Mr. Core

5. **Land Surveying.** I. 4 Hrs. Principles and technique of land surveying, including boundary and topographic surveys, location of roads, and computation of areas. PR: Math. 2. Mr. Baker

6. **Topographic Mapping.** II. 2 Hrs. Practice in lettering and drawing topographic maps from field data. Also mapping in the field with traverse-board outfits. PR: C. E. 5. Mr. Baker

10. **Forest Soils.** I. 3 Hrs. Soils which occur in the forest and their relationship to tree growth. PR: Geology 1 and Chemistry 4. Mr. Pohlman

11. **Silvics.** II. 3 Hrs. The forest and its environmental factors; site and type characteristics. PR: Agron. 10, Botany 21, and Forestry 4 Mr. Brooks

21. **Forest Mensuration.** II. 4 Hrs. Measurement of forest products, trees, and stands; timber estimating; introduction to growth and yield. PR: Civil Engineering 5. Mr. Holsoe

100S. **Forestry Camp.** S, Ten weeks. 10 Hrs. Field practice in land surveying, forest measurements, and tree identification; observation of forest types, forest improvements, and utilization practices. PR: Civil Engineering 6 and Forestry 4 and 21. Mr. Besley and Staff

112. **Silviculture.** I. 4 Hrs. Silvicultural systems used for obtaining natural reproduction; intermediate cuttings; treatment of various species in different types. PR: Forestry 11. Mr. Holsoe

113. **Silviculture.** II. 3 Hrs. Nursery practice; seeding and planting; all phases of artificial regeneration. PR: Forestry 11. Mr. Holsoe

114. **Forest Economics.** I. 3 Hrs. The place of the forest industry in the national economy; forest resources of the world; current movements within the wood-using industry as influenced by economic trends. PR: Economics 1 and Forestry 100S. Mr. Besley

122. **Forest Mensuration.** II. 3 Hrs. The measurement of growth and yield; statistical methods applied to forest measurement problems. PR: Forestry 21. Mr. Holsoe

123. **Forest Management.** I. 5 Hrs. Use of practical silvicultural methods on forest tracts; the regulation of the cut in order to obtain a sustained yield; the coordination of multiple uses of the same forest; the preparation of plans for the profitable management of specific forested areas. PR: Forestry 100 S, 112, and 141. Mr. Besley

124. **Forest Finance.** I. 3 Hrs. Costs of producing and harvesting the forest crop. Wood production as a business enterprise. PR: Forestry 100S and 114. Mr. Besley

125. **Forest Policy.** II. 3 Hrs. Land policy in the United States; its historical, legal, and administrative development; the forester's relations with the public. Organization of public and private forest agencies. Mr. Percival

131. **Wood Technology.** I. 3 Hrs. The structure and identification of the important woods of the United States; their physical properties and uses. PR: Forestry 4. Mr. Erickson

132. **Wood Technology.** II. 3 Hrs. Continuation of Forestry 131. Mr. Erickson

133. **Lumbering.** I. 3 Hrs. Logging practices and lumber manufacture. Logging and mill equipment. Important factors affecting lumber grades. PR: Forestry 100S and 132. Mr. Erickson

134. **Forest Products.** II. 2 Hrs. The production and uses of forest products other than lumber and timber. PR: Forestry 132. Mr. Erickson

135. **Wood Conditioning.** II. 3 Hrs. The purposes, effects, and methods of seasoning and preserving wood. PR: Forestry 132. Mr. Erickson

141. **Game Management.** II. 3 Hrs. Basic principles of handling wild life as a forest crop. (This course is not intended to train wild-life specialists.) In recognition of the importance of fish, game animals, and fur-bearing animals in the forest, the course considers the problems of the maintenance of a maximum wild-life population. PR: Botany 30 and Zoology 2. Mr. Brooks

142. **Recreational Developments.** II. 3 Hrs. Needs of the active and passive recreationist and means of supplying facilities for meeting these needs on public forests. PR: Civil Engineering 6, and For. 100S. Mr. Brooks

151. **Forest Protection.** I. 2 Hrs. Preventive actions, preparation activities, and control of forest fires as practiced on publicly-owned forests. Mr. Percival

152. **Forest Entomology.** I. 2 or 4 Hrs. Insects of importance to the forester; recognition and control of insect pests in the forest. Students who have credit for Entomology 2 (102) may receive only two hours' credit in this course. Mr. Peairs

153. **Forest Pathology.** II. 4 Hrs. The important diseases of forest and shade trees; their causes and methods of control. PR: Botany 2 and Forestry 132. Mr. Leach

180. **Farm Forestry.** II. 2 Hrs. Principles of forest management and their application to the establishment, care, and utilization of the farm woods. PR: Botany 2. Professional forestry students may not take this course for credit. Mr. Percival

THE DIVISION OF HOME ECONOMICS

Instruction in Home Economics

The offerings in the Division of Home Economics are designed to meet a wide variety of educational needs. Since education, basic to better living, is a significant need in the life of this country today, and since home economics concerns itself primarily with the immediate problems of home and family life, it is in a strategic position to help the youth of today to meet this need in a manner which will be both socially and personally satisfactory.

The work of the first two years is largely cultural and includes courses in written and spoken English, English literature, natural and social sciences, and other courses basic to home economics. During the last two years, the student is permitted great freedom in the choice of courses in home economics which will contribute most to her development as an individual, or which lead quite directly into the vocation toward which she is aiming.

An important part of the training is the experience of living for five weeks during the senior year, in the Home Management House, where students put into practice in a family situation what they have learned in the previous years of training. Here they are given opportunity to demonstrate their skill in managing a home successfully on different income levels and are given practical experience in the care of an infant.

For the student who is interested in institutional work, close cooperation with the Department of Halls and Commons gives opportunity for work in quantity cookery and for experience in learning to manage time, money, and energy in an institutional situation. Interested students are privileged to work in the University Cafeteria or in one of the dormitory kitchens.

Many opportunities today are open to trained home-economics graduates. West Virginia graduates are now teaching homemaking at junior high school, senior high school, and college levels; others are supervising the teaching of homemaking. West Virginia graduates may be found serving as home demonstration agents, or girls' club leaders, or as commercial demonstrators. A considerable number are engaged in institutional work as hospital dietitians or as managers of tea rooms, cafeterias, or college dining halls. Some are engaged in scientific research or in allied work as laboratory technicians.

Social service, either through private or government agencies, has claimed the interest of a number. Nursery schools have turned to West Virginia home-economics graduates for supervisors. Department stores have offered a variety of interesting jobs in selling, counselling, interior decoration, and other phases of retailing. One or two graduates with a flare for writing have found work on women's magazines. New fields are constantly opening up, so that the person trained in home economics has an ever-widening choice of vocation.

The Division of Home Economics occupies two floors in the south end of Oglebay Hall, where may be found offices, conference room, and a small departmental library in addition to classrooms and laboratories well equipped for the teaching of related art, textiles and clothing, and food and nutrition. Adjacent to the foods laboratory is a family service unit consisting of kitchen, dining room, and reception room.

Additional laboratories are located outside of Oglebay Hall but in close proximity, namely, the Home Management House, the University Demonstration High School, and the various kitchens and service centers included in the Department of Halls and Commons.

The Division endeavors to keep in constant touch with the various agencies which employ home-economics graduates, and it assists graduates in finding employment.

The Baccalaureate Degree in Home Economics

The course leading to the degree of Bachelor of Science in Home Economics includes a study of problems connected with the home and family and is designed to give the student an appreciation of the plan and function of the home in the social order, as well as impart some skill in the management of the human and material resources of the home.

Sufficient electives are allowed to permit the student to satisfy requirements for a first-class high-school certificate to teach in West Virginia or to fulfill the preparatory requirements for apprenticeship, interneship, or similar vocational experiences in a variety of fields, including those of institutional management, hospital dietetics, retailing, extension work, and other governmental services.

Many of the courses offered to home economics majors in the College of Agriculture are open also to students in the College of Arts and Sciences who wish to include some home economics subjects in their general electives, or who wish to offer home economics as a major in the College of Arts and Sciences. (See General Catalogue, Arts and Sciences section.)

CREDITS AND HONOR POINTS REQUIRED

The degree of Bachelor of Science in Home Economics will be conferred upon any student who satisfies the entrance requirements and offers 128 hours of college credits, including all requirements set forth below.* The student must receive at least as many honor points as credits in order to be eligible for graduation. For a complete description of the honor-point system see page 52.

*A student may decrease the total number of hours required for graduation by doing work of superior quality. For details of this plan, see page 53.

Of the 128 hours required for the degree, 82 hours are prescribed as indicated in the curriculum which follows. The remaining 46 hours must be selected by the student subject to the approval of the class adviser. The required and elective courses in the subject of home economics must amount to no fewer than 40 hours in all. No student is permitted to register for less than 14 or more than 18 hours in one semester without permission of the Committee on Scholarship.

CLASSIFICATION OF STUDENTS

To be classified as a conditional freshman a student must have credit for at least 15 units of entrance requirements; to be classified as a regular freshman she must have fulfilled all entrance requirements. To be classified as a sophomore she must have credit for 25 hours of college work; as a junior, 58 hours; as a senior, 92 hours.

CLASS ADVISERS

Each student in the division is assigned for educational guidance to a member of the faculty who serves as her adviser. It is the function of this adviser to counsel the student as to the courses which she will take and also to counsel her concerning any conditions or problems which directly or indirectly affect her progress in the University.

COURSES REQUIRED OF ALL STUDENTS IN HOME ECONOMICS

English, rhetoric, and literature (no more than 3 hrs. in public speaking), 12 hrs.; chemistry, 8; history, 4; biological science (including bacteriology), 8; economics and sociology, 6; physical education, 4; total 42 hrs.

Home economics—foods, 8 hrs.; textiles and clothing, 6; applied arts, 8; home management, 6; child development, 2; electives, 10; total, 40 hrs.; general electives, 46 hrs.; grand total, 128 hrs.

The Suggested Curriculum

The curriculum given below suggests subjects which may be taken by all home economics students in the first two years.

FIRST YEAR				SECOND YEAR			
First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*	*First Sem.*	*Hrs.*	*Second Sem.*	*Hrs.*
English 1	3	English 2	3	Biology 1	4	Biology 2	4
Home Ec. 31	4	Home Ec. 17	4	Home Ec. 3	4	Home Ec. 4	4
History 1	3	History 2	3	Economics 1	3	Physiol. 51	4
Chem. 1 or 3	4	Chem. 2 or 4	4	Phys. Ed. 3	1	Phys. Ed. 4	1
Phys. Ed. 1	1	Phys. Ed. 2	1	English or		English	3
Home Ec. 1	1		—	Public Spkg.	3		—
	—				—		
	16		15		15		16

The work of the third and fourth years is largely elective and will be determined by the cultural and vocational interests of the students.

Students who are looking forward to further work in nutrition as cafeteria managers or as hospital dietitians should take Chemistry 31, 15, Zoology 2, Physiology 51, Biochemistry 139, Chemistry 5 and 222, suggested, if schedule permits, and Home Economics 105, 108, and 215.

Students who wish to do further work in clothing and textiles should take Chemistry 31 and 5, Economics 1 and 2, and Home Economics 225 and 226 when offered.

Students who wish to teach home economics must meet the State and University certificate requirements. See the bulletin, Regulations Governing Teacher Selection, etc.

Recommendation for Certification of Teachers

Students who wish to obtain a high-school certificate to teach home economics must meet the requirements of the State Board of Education and of the College of Education. Recommendation for certification is made by the division of home economics to the dean of the College of Education. For requirements see the bulletin, Regulations Governing Teacher Selection, etc.

The head of the Division of Home Economics in the College of Agriculture, Forestry, and Home Economics is also a member of the College of Education and is the adviser for students wishing to meet the requirements for a high-school certificate to teach home economics.

Two types of high-school certificates in home economics are possible: (1) for teachers of home economics with a second teaching subject; (2) for teachers of vocational home economics who must first meet the requirements for the first-class high-school certificate to teach home economics with a second teaching subject.

Students transferring from other institutions should do so not later than the junior year. A minimum residence of the entire senior year is required, and students with irregular schedules will require a longer time.

The Curriculum for Teachers of Vocational Home Economics

THIRD YEAR				FOURTH YEAR			
First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*	*First Sem.*	*Hrs.*	*Second Sem.*	*Hrs.*
Home Ec. 107	4	Home Ec. 120	2	Home Ec. 251	2	Home Ec. 254	3
Home Ec. 115	2	Home Ec. 240	2	Home Ec. 252[3]	3	Home Ec. 135	4
Sociol. 101	3	Zoology 3	4	Phys. Ed. 180	2	Educ. 224[3]	3
Educ. 106	3	Botany	4	Electives	9	Educ. 262[3]	2
Bacter. 141	4	Educ. 109	2		—	Educ. 163[3]	2
	—	Educ. 112	2		16	Educ. 120[3]	2
	16		—			Educ. elective	2
			16				—
							18

REQUIREMENTS FOR TEACHERS OF HOME ECONOMICS WITH A SECOND TEACHING SUBJECT

(See the Bulletin on Teacher Certification Regulations)

REQUIREMENTS FOR TEACHERS OF VOCATIONAL HOME ECONOMICS

Students who wish to obtain the vocational home economics certificate must meet (1) the requirements for the B.S.H.E. degree; (2) the requirements for the first-class high-school certificate to teach home economics with a second teaching subject; (3) the requirements for the vocational home economics certificate as listed below.

	Hrs.	Total
I. COURSES (minimum hours)		
General:		
Completion of the minimum hours in a second teaching field as set forth by the State Department of Education	24	
English and public speaking	12	
Biological science	8	
History, economics, sociology, and political science	15	
Physical education and health	6	65
Professional:		
Education 106, 109, 120, 112, 214, or their equivalent	11	
Education 163, and 224	5	
Education 262 (Vocational Home Economics in secondary schools)	2	20
Education elective	2	
Technical:		
Home economics		
Foods and nutrition	10—12	
Textiles and clothing	8—10	
Applied arts	8	
Home management	8	
Child development	2	40
Electives:	0—4	3
Total		128

II. SCHOLARSHIP:
In order to obtain the first-class high-school certificate it is necessary to have a general scholarship average of one honor point per credit hour and an average of one honor point per credit hour in each teaching field and in education. In addition to meeting these requirements, it is necessary to be in the upper half of the senior class in scholarship.

III. TEACHING ABILITY:
Of superior quality, as demonstrated in a semester of directed teaching at the University High School, an approved vocational high school, under supervision of home-economics education in the College of Education. In addition it is necessary to be in the upper half of the senior class as rated on the Minnesota Rating Scale for home-economics teachers.

IV. HOME-MAKING EXPERIENCE:
1. Residence in the University Home Management House of sufficient length to show the abilities necessary in the management of the home.
2. Vocational experience in all phases of home-making.
3. Experience in group feeding under supervision.
4. Child-care project.

V. PERSONALITY TRAITS:
The candidate must be in the upper half of the class in the personality ranking, as rated on the Minnesota Rating Scale for personal qualities of home economics teachers to be considered.

[3]The Education block — Ed. 224, 120, 163, and 262 — is available to one-half of the class in the first semester and to the other half in the second semester. The same holds true of Home Economics 252.

THE COURSES OF INSTRUCTION IN HOME ECONOMICS

Professor NOER; Emeritus Professor COLWELL; Assistant Professors CAMERON, NESBITT, and PALMER; Misses DIETRICH, WASMUTH, and WHITE; Mrs. FERRY

(1) Students in the College of Arts and Sciences who major in home economics must meet the requirements in that college and also the departmental requirements as outlined on page 142.

(2) Students who wish to obtain the high school certificate to teach home economics must meet the requirements of the State Board of Education, the College of Education, and the Division of Home Economics. The B.S.H.E. degree in the College of Agriculture, Forestry, and Home Economics is planned to allow sufficient electives to meet these requirements.

(3) Students from other colleges who wish to elect home economics courses without meeting the Science requirements may take Home Economics 16, 17, 31, 115, 120, 134 or 135, 138, 240, 214, and 254.

Food and Nutrition

Assistant Professors CAMERON and NESBITT; Instructors WASMUTH and FERRY

3. Food Selection and Preparation. I, II. 4 Hrs. Two lectures and two laboratories. PR: Chemistry 1 or 3 or its equivalent. Miss Nesbitt

4. Food Selection and Preparation. II. 4 Hrs. Two lectures and two laboratories. PR: Home Econ. 3 or its equivalent; Chemistry 1 or 3. Miss Nesbitt

105. Food Preservation. I. 2 Hrs. One lecture and one laboratory period combined. PR: Home Econ. 4 or its equivalent. Miss Nesbitt

107. Dietetics. I. 4 Hrs. Two lectures and two laboratories. PR: Home Econ. 3 and 4, and biological science 8 hours. Miss Cameron and Miss Nesbitt

108. Group Feeding. I, II. 2 Hrs. One laboratory. PR: Home Econ. 3 and 4. Mrs. Ferry

161. Requirements for Normal Human Nutrition. I, II. 3 Hrs. Lecture and demonstration. Two 2-hour and one 1-hour class per week. Especially designed for students in other colleges who are interested in nutrition but who cannot satisfy science requirements for Home Economics 14. Staff

212. Human Nutrition. II 4 Hrs. Two lectures and two laboratories. PR: Chemistry 31, Home Econ. 3, 4 and 107. Miss Nesbitt

215. Nutrition Work with Children. I, II. 2 Hrs. One lecture and one laboratory. PR: Home Econ. 3, 4, and 107. Miss Nesbitt

216. Community Nutrition Problems. I, II. 2 Hrs. Lecture and field work PR: Home Econ. 3, 4, 107, 215, or consent of instructor. Staff

217. Diet in Disease. II. 2 Hrs. PR: Home Econ. 3, 4, and 107; Zoology 151. Miss Cameron

Biochemistry

NOTE: For description of the course in general biochemistry see the Announcements of the School of Medicine.

Textiles and Clothing

Professor NOER and Instructor DIETRICH

16. Clothing. I, II. 2 Hrs. Lecture and laboratory combined. Miss Dietrich

17. **Textiles.** I, II. 2 Hrs. Lecture and laboratory combined. Miss Dietrich

115. **Clothing Selection.** I, II. 2 Hrs. Two lectures. PR: H. E. 17. Miss Dietrich

120. **Selection and Construction of Clothing.** I, II. 2 Hrs. 2 laboratories. PR: Home Econ. 16, 17, and 31, or consent of instructor. Miss Dietrich

225. **Advanced Clothing.** I, II. 2 Hrs. Three laboratories. PR: Home Econ. 17 and 120 Miss Dietrich

226. **Advanced Textiles.** II. 2 Hrs. Two laboratories. PR: Home Econ. 17. Chemistry 1 and 2. Miss Dietrich

Applied Arts

Assistant Professor PALMER

31. **Applied Design.** I, II. 4 Hrs. Two lectures and two laboratories. Miss Palmer

134. **House Decoration.** II. 3 Hrs. For non-majors. One lecture and two laboratories. Miss Palmer

135. **Home Planning and Furnishing.** I, II. 4 Hrs. Suggested PR: Home Econ. 16, 17, and 31. Miss Palmer

136. **Advanced Home Planning and Furnishing.** I, II. 2 Hrs. Two laboratories. PR: Home Econ. 135 or consent of instructor. Miss Palmer

Health and Child Care

Professor NOER; Instructor WASMUTH

240. **Child Development.** I, II. 2 Hrs. Two lectures. PR: Home Econ. 4 and 107; suggested prereq.: Psychology 1. Miss Wasmuth

Home Management

Professor NOER; Assistant Professor NESBITT; Instructor WASMUTH

251. **Mechanics of the House.** I, II. 2 Hrs. Two lectures. PR: 25 hours of home economics or consent of instructor. Miss Nesbitt

252. **Home Management Laboratory.** I, II. 3 Hrs. To be preceded or accompanied by Home Econ. 251 and 254. Miss Wasmuth

254. **Home Management.** I, II. 3 Hrs. Three lectures. PR: Home Econ. 3, 4, 107, 31, 135, 115, 16, 17, 120, or consent of instructor. Miss Nesbitt

Home Economics Education

(For courses offered, see Summer Session Bulletin)

General Courses

1. **Home Economics Survey.** I, II. 1 Hr. A brief survey of the scope and field of home economics. One lecture. Miss Noer

138. **Home Crafts.** I, II. 2 Hrs. Weaving, decorative stitching, knitting, crocheting, leather-tooling, book-binding, sketching, basketry, needlepoint, and batik. Satisfies the co-curricular requirements for certification in any field. Miss Dietrich and Miss Palmer

160. **Problems in Home Management and Family Living.** I, II. 2 to 4 Hrs. A general course dealing with various phases of family life and home management. Open to juniors and seniors not majoring in home economics. Staff

180, 181. **Special Topics in Home Economics.** I and II. 1 to 4 Hrs. Staff

270. **History of Home Economics.** I, II. 1 Hr. One lecture. Miss Noer

The College of Arts and Sciences

Organization

The University, through its liberal arts college, offers that academic training which is so essential today as a foundation for good citizenship, enlightened leadership, and effective professional or technical training. It puts thoroughness above breadth of offerings. It provides a curriculum rigid enough to conserve the best in the cultural subjects, yet elastic enough to meet the varying talents and aptitudes of individual students.

Present-day standards in business, industry, and the professions are becoming more and more exacting. Increasing emphasis is being placed upon a liberal education as a foundation for technical or professional work. As a consequence, the paths to the professions lead through this college. Preprofessional curricula have been arranged in law (three years), education (two years), medicine (two, three, or four years), dentistry (two or three years), nursing, social administration, and journalism.

The College of Arts and Sciences includes a lower division and an upper division. The lower division consists of the work of the first and second years, and the upper division consists of the work of the third and fourth years.

The instruction in the College of Arts and Sciences is administered through the following departments:

> Art; botany and zoology; chemistry; classics; economics and business administration; English language and literature; geology, mineralogy, and geography; Germanic languages and literatures; history; home economics; library science; mathematics, philosophy and phychology; physics; political science; public speaking; Romance languages and literatures; sociology and public welfare; and social administration.

Two baccalaureate degrees are granted in this College: Bachelor of Arts (A. B.) and Bachelor of Science (B. S.). The Bachelor of Arts degree is conferred upon those who pursue the four years of academic work in the College or upon those who pursue three years of work in this College and one year in either the College of Law or the School of Medicine.[1]

The Bachelor of Science degree is conferred upon those who pursue the combined scientific and medical courses, or special curricula in chemistry or in business administration.[1]

Main Objectives

The curriculum of the College of Arts and Sciences has four main objectives:

1. *General Culture.* The work of the lower division is intended to complete what is usually termed "a general education." It rounds out the program of study pursued in the high school. It is based on the belief that the student should become familiar with different fields of knowledge to the end that he may select wisely the field for specialization. This general culture should include studies in English, at least one foreign language, natural science, and the social sciences. In the selection of subjects or groups in the lower

[1]See page 53, "Classification of Students."

division, the student should be guided somewhat by the nature of the subjects taken in the high school so that by the close of the second year the student will have a general acquaintance with various fields of knowledge.

Students who are not qualified for regular college work, as well as those who do not expect to spend more than one or two years in this College and are not candidates for the junior certificate, may, with the approval of the adviser, select such lower division courses as they are qualified to pursue with profit.

2. *Opportunity for Specialization.* The work of the upper division is intended to provide intensive study in one or two fields of knowledge. It is based on the belief that an educated man or woman should not only know the fundamentals of several branches of study but should have a rather thorough knowledge of some selected field. In the upper division, therefore, the student concentrates on a major, and one or two minors.

3. *A Reasonable Freedom of Electives.* The curriculum of this college is sufficiently flexible to meet the needs and tastes of individual students without, at the same time, exposing the students to the disadvantages of a free elective system.

4. *Special Provisions for the Junior Certificate.* Experience has shown that students whose average in high-school subjects was below 75%, or students who ranked in the lowest one-fourth of the high-school graduating class, probably will not succeed in the regular college curriculum. Nevertheless such students may, by a wise selection of studies, profitably spend one or two years in college. Other students for financial or other reasons may not be able to attend college for more than one or two years. It is believed that students in either group may spend their time more profitably by taking courses in which they are particularly interested from a cultural or vocational point of view than by following the curriculum leading to the A. B. degree. Students who are not candidates for the A. B. degree but who earn 64 hours of college credit and 64 honor points, including general University requirements, in residence in this college will be awarded the Junior Certificate of the College of Arts and Sciences.

Advisers

Lower Division. Each student in the lower division is assigned to an adviser who will assist in registration and who will have general supervision over the work of the student. Electives are chosen and changes in the program are made with the approval of the adviser. Students are urged to confer with advisers in respect to any difficulties or mal-adjustments in college life.

Upper Division. Each student in the upper division is assigned to an adviser of the department to which the major subject belongs. The program of study and all changes in class assignments must be approved by the adviser

The Major Subject

In the upper division, the work is based on the belief that an educated man or woman should not only know the fundamentals of several branches of study but should have a rather thorough knowledge of some selected field. In the upper division, therefore, the student concentrates on a major and one or two minor subjects selected from the following list of subjects:

Art
Botany
Chemistry
Classics
Economics
Business
English
French
Geology
German
History
Home economics
Library Science
Mathematics
Philosophy
Physics
Political science
Psychology
Public speaking
Sociology and public welfare
Spanish
Zoology

General Requirements for All Degrees

Foreign Language. Fewer than 6 hours in an ancient or modern language will not be counted towards any degree, diploma, or certificate in this College unless work in the same language has been offered for entrance.

Electives. At least 6 hours must be taken in each subject as an elective, but no more than 9 hours in isolated courses of less than 6 hours each, elected with the approval of the adviser, may be offered.

In addition to the regular elective work in the College of Arts and Sciences which is offered by the faculties in other colleges, work not to exceed 15 hours in the College of Law, the College of Agriculture,[1] the College of Engineering and School of Mines,[2] the School of Music,[3] the School of Physical Education and Athletics,[4] the School of Journalism, or 12 hours of upper-division work in Military Science and Tactics, or 20 hours in the College of Education, may be included in the list of elective credits offered by students in the College of Arts and Sciences. The total number of hours elected from other colleges shall not, however, exceed 24 hours in all.

The course in general biochemistry is available (without additional fees) in the School of Medicine.

Major Subject. The maximum amount of credit allowed in any one department is ordinarily 40 hours. Exceptional cases involving extension of hours in the major must have the previous approval of the Scholarship Committee.

Requirements for the Bachelor of Arts Degree

The Bachelor of Arts degree in the College of Arts and Sciences is conferred upon any student who complies with the general regulations of the University concerning degrees, satisfies all entrance, college, and departmental requirements, and completes any one of the following courses of study:

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[1]In addition to the 15 hours, the following courses in agriculture are regular electives in the College of Arts and Sciences: Farm Economics 131, and all courses in entomology, genetics, and plant pathology. (See the special curriculum for the A. B. and B. S. in Agriculture.)

[2]The engineering and mining electives include Chemical Engineering 101, 202, 205, 206, 210, 220, and 221; Civil Engineering 1, 2, 3, 10, and 115; Electrical Engineering 100, 101, 102, 103, 200, 201, 202, 203, 205, and 206; Mechanical Engineering 20, 23, 24, 26, 29, 221, and 222; Mechanics 101, 102, 103, and 104; and Mining Engineering 106, 201, 202, 203, and 204. In addition the student may elect with the consent of his adviser, when his major is physics, Mechanical Engineering 1 and 13S and 101 to 107 (10 hrs.); and Ch. E. 110S and 235S (4 hrs.).

[3]The music electives include Theory of Music 1, 2, 72, 73, 75, 77, 79, 109 to 118, 180 to 183, 240, 241, and 281: Ensemble 153 to 156; classes in orchestra instruments 191 to 196; Men's Glee Club, Women's Glee Club, and University and Community Orchestra; and piano or voice or violin or pipe organ or band and orchestra instruments.

[4]The electives in physical education are Physical Education 76, 78, 150, 166, 167, 175, 276, and 277.

A. Regular course (128 hours)
B. Pre-Medical course (128 hours)
C. Combined courses:
   (a) Arts and Law (124 hours)
   (b) Arts and Medicine (128 hours)

Students transferring to West Virginia University from other institutions should ordinarily do so not later than the beginning of the third year. Such students must meet all the requirements of the lower division. All deficiencies must be met as soon as possible after admission to this College, whereupon such student may register regularly in the upper division.

Maximum and Minimum Work. A student who has made an average the preceding semester of "B" or better while carrying at least 16 hours may enroll for a maximum of 19 hours without petitioning the Scholarship Committee. A student who has made an average in the preceding semester of "C" or better while carrying at least 16 hours may without petitioning enroll for a maximum of 18 hours, 36 hours for the year, provided that no more than 34 hours are academic work.

Note

In the following departmental curricula the number of the course is indicated in bold-face type. The figure in the parentheses immediately following refers to the value in semester credit hours offered for the course.

A. REGULAR COURSE (128 HOURS)

Four years in the College of Arts and Sciences

Lower-Division Curriculum

(a) *General University Requirements.*
Military science[1]—6 hours.
Physical education (men)[2]—2 hours.
Physical education (women)[2]—4 hours.

(b) *Science.* At least 8 hours of a laboratory science chosen from the following list: botany, chemistry, geology, physics, zoology, biology, psychology.

(c) *Foreign Language.* To be eligible for graduation a student must have completed twelve semester hours in a foreign language in college or two units for entrance and six hours in the same language in college.

(d) *English composition.* Ordinarily 6 hours of English composition (English 1 and 2) will be required of all freshmen. In case a freshman is not qualified to meet the requirements in English 1, as shown by placement or other tests, he (or she) will be assigned to English 1C, which carries 3 hours of University credit. Upon the successful completion of the work in English 1C the student will register for the regular work in English 1.

[1]Military science is required of all male students except those who at the time of matriculation are 23 years of age or have completed no less than 58 hours of work, and all who have credit for 4 hours of military science or 1 unit of entrance credit in military academy. Students must register for military science upon their entrance into the University and continue in the course until the full requirement has been met or until a regular exemption card is filed in the Registrar's office.

[2]Two hours of physical education for men, to be taken during the first year of residence, and four hours of physical education for women, to be taken during the first and second years in residence, are required for graduation of students presenting fewer than 58 semester hours, unless previous credit has been allowed.

(e) *Additional.* At least 6 hours in each of three of the following
(1) English (additional to d), or public speaking.
(2) Foreign language (additional to c).
(3) Mathematics.
(4) History.
(5) Political science.
(6) Economics or sociology.
(7) Philosophy and psychology.
(8) Home economics.
(9) Science (additional to b).
(10) General introductory courses.
(11) Art

(f) *Electives,* under the supervision of the adviser, to make a total of 64 hours. Ordinarily freshmen should register for required courses. Electives should be used in the second year chiefly in meeting the preliminary requirements of the departments in which the student expects to do the work of the major and minor (or minors) in the upper division.

Upper-Division Curriculum

1. *A major sequence* of 18 to 24 hours of upper-division courses, preceded by the proper lower-division courses prescribed as preparation for the major. This work should represent a coherent and progressive sequence of courses as outlined in the departmental announcements. The major subject will be selected when the student registers in the upper division, but the student must plan the work in the lower division in such way as will meet the departmental requirements for the major and minor.

2. *A minor sequence* of 9 to 12 hours of upper-division courses, preceded by the proper lower-division courses, in some department closely related to the major department. At the option of the major department, a second minor of 6 hours may be required in a second department closely related to the major department.

3. *Electives,* under the supervision of the departmental adviser, to make a total of 128 hours.[1] At least 52 of the 64 hours in the upper division must be selected from upper-division courses.[3] A departmental adviser may permit a student in the upper division to elect lower-divison courses to an amount not exceeding 12 hours when such action will be an advantage to the student in connection with the major or minor sequence, but honor points will count only at the rate of 1 honor point per credit hour.

B. PRE-MEDICAL CURRICULA[2]

The following sequence of courses is worked out for the general guidance of students who are preparing for the study of Medicine. It includes all the required subjects. While the pre-medical student is meeting the minimum requirements of the School of Medicine as stated in the General Catalogue, the medical faculty prefers that he use his elective hours to secure a broad, general training rather than to secure a large number of credits in any one special

[1]A student may decrease the total number of hours required for graduation by doing work of superior quality. For details of this plan see page 53.
[2]A specific statement concerning entrance requirements to the School of Medicine will be found on page 42.
[3]A candidate for the B. S. in Chemistry should present 56 hours in upper division courses.

field. Leading medical educators in the United States today also are definitely in favor of a good general training rather than extensive specialization in the so-called pre-medical sciences.

FIRST YEAR, FIRST SEMESTER: English 1 (3); Chemistry 3 (4); Biology 1 or Zoology 1 (4); modern language or Latin (3); military science (1); physical education (1). Total, 16 hours.

FIRST YEAR, SECOND SEMESTER: English 2 (3); Chemistry 4 (4); Zoology 2 (4); modern language or Latin (3); military science (1); physical education (1). Total, 16 hours.

SECOND YEAR, FIRST SEMESTER: English 13 (2) or 3 (3); Physics 1 and 3 (4); Chemistry 5 (4); zoology, or Mathematics 2*, or Pyschology 1, or cultural group† (3); modern language (3); military science (2). Total, 17 or 18 hours.

SECOND YEAR, SECOND SEMESTER: English 14 (2) or 4 (3); Physics 2 and 4 (4); Chemistry 15 (3); zoology, or Mathematics10,* or Psychology 1, or cultural group† (3); modern language (3); military science (2). Total 16 or 17 hours.

THIRD YEAR: Chemistry 163 (3) and 136 (6); Zoology 231* (4); zoology group, or mathematics, or Psychology 101 (3); cultural group† (12); related science group‡ or modern language (4 to 6). Total, 32 or 34 hours.

FOURTH YEAR: Chemistry Group (2 to 6); zoology group (including 231)* (2 to 6); cultural group† (12); related science group‡ (6); modern language group or electives as needed to complete hours required for graduation.

C. COMBINED COURSES[2]

Arts and Medicine

Course A. Students receive the Bachelor of Arts Degree upon the completion of four years of pre-medical work (128 hours), and the Bachelor of Science degree at the completion of two years of medicine.

Course B. Students who enter the School of Medicine after the completion of the first three years (90 hours exclusive of military and physical education) of the pre-medical curriculum receive the Bachelor of Arts degree upon the completion of the first year of medicine, and the Bachelor of Science degree upon the completion of the second year of medicine.

Students who are working toward the combined A. B. degree described in Course B above while taking the courses in the School of Medicine must also be registered in the College of Arts and Sciences.

*Recommendations — Many medical schools require or recommend 6 hours of Mathematics; some recommend that Zoology 231 (Comparative Anatomy) and courses in Chemistry be taken the year before entering medical school; many require and many recommend a knowledge of Latin. The schedule provides for all these requirements and recommendations.

†Cultural group — To be chosen from English, humanities, economics, sociology, history, political science, philosophy, public speaking, foreign language, education, music.

‡Related science group — To be chosen from biology, botany, physics, mathematics, geology, psychology, genetics, pharmacy, physiology.

[2]A specific statement concerning entrance requirements to the School of Medicine will be found on page 42.

Modern Foreign Language Requirements:

Course A requires a reading knowledge of both French and German, with a minimum requirement of 18 hours. Course B requires a reading knowledge of either German or French, with a requirement of 12 hours, which may be divided between the two languages by students who present two units of either language for entrance.

D. PRE-DENTAL COURSES

The following courses are planned for students preparing for the study of dentistry. In case a student expects to enter a certain school of dentistry these courses may be changed to suit his needs.

(1) ONE-YEAR COURSE

A course preparing for schools of dentistry requiring for entrance one year of pre-dental work. This course has the bare minimum requirements and little of cultural value. Few schools of dentistry admit on one year's preparation.

FIRST SEMESTER: English 1 (3); Chemistry 3 (4); Biology 1 (4); Physics 1 and 3 (4); military science (1); physical education (1). Total, 17 hrs.

SECOND SEMESTER: English 2 (3); Chemistry 4 (4); Zoology 3 (4); Physics 2 and 4 (4); military science (1); physical education (1). Total, 17 hrs.

(2) TWO-YEAR COURSE

A course preparing for schools of dentistry requiring for entrance two years of pre-dental work. This course has, in addition to the minimum requirements, certain courses of general cultural value.

FIRST YEAR, FIRST SEMESTER: English 1 (3); Chemistry 3 (4); Biology 1 (4); German or French (3); military science (1); physical education (1). Total, 16 hrs.

FIRST YEAR, SECOND SEMESTER: English 2 (3); Chemistry 4 (4); Zoology 3 (4); German or French (3); military science (1); physical education (1). Total 16 hrs.

SECOND YEAR, FIRST SEMESTER: Physics 1 and 3 (4); Chemistry 15 (3) and 63 (3); Psychology 1 (3) or Zoology 231 (4); German, French, or English 3 (3); military science (2). Total, 18 hrs.

SECOND YEAR, SECOND SEMESTER: Physics 2 and 4 (4); Chemistry 36 (6); Psychology 1 or Zoology 210 (3); German, French, or English 4 (3); military science (2). Total, 18 hrs.

(3) THREE-YEAR COURSE

A course preparing for schools of dentistry requiring for entrance three years of pre-dental work. The first two years (67 hours) of this course are identical with course B except that, during the second year, French or German is taken instead of English 3 and 4. Students who enter an approved School of Dentistry after the completion of this course (90 hours exclusive of military and physical education) receive the Bachelor of Arts degree upon completion of the first year of dentistry.

THIRD YEAR: English 3 (3) and 4 (3); economics or sociology or history or political science or modern language (18); Chemistry 107 (2) and 238 (5); physics or psychology or elective (3). Total, 34 hrs.

E. ARTS AND LAW

Three years (96 hours) in the College of Arts and Sciences, and one year (28 hours) in the College of Law

A prelegal course has two main objectives. The first is to enable the student to acquire a general cultural background, which is in harmony with the chief purpose of the College of Arts and Sciences. The second is to help the student to secure a more specialized background for the legal course that is to follow.

In nearly all cases, these objectives can be attained more effectively by taking the regular four-year Arts and Sciences course, during the last two years of which the student may choose his major and minor with particular reference to his legal work. In addition to securing the Bachelor of Arts degree, it will qualify him for admission to almost any law school.

To enable students to receive the degree of Bachelor of Arts and Bachelor of Laws in a shorter period of time, a special course has been arranged by which the student may complete the required studies in the College of Arts and Sciences in three years, and, after passing the entire first year of work in the College of Law, be awarded the degree of Bachelor of Arts. This course satisfies the entrance requirements to the College of Law, but permits less freedom in choosing electives. All prelegal students who did not make an average of B or better in English 1 and 2 are required to take English 13 and 14, two courses with certain sections designed especially for prelegal students. The student should confer with the Pre-Law adviser as soon as he enters the University. The following schedule is suggested as being adapted to the above course:

FIRST YEAR, FIRST SEMESTER: English 1 (3); botany, chemistry, geology, physics, zoology, or biology (4); French, German, or Latin[1] (3); History 1 (3) or Humanities 1 (4); military science (1); physical education (1). Total, 15 or 16 Hrs.

FIRST YEAR, SECOND SEMESTER: English 2 (3); botany, chemistry, geology, physics, zoology, or biology (4); French, German, or Latin[1] (3); History 2 (3) or Humanities 2 (4); military science (1); physical education (1). Total, 15 or 16 Hrs.

SECOND YEAR, FIRST SEMESTER: English 13 (2); language (3); History 52 (3); Political Science 4 (3); Social Science 1 (4); electives (lower-division courses should be taken in the departments in which the student may wish to do upper-division work); military science (2).

SECOND YEAR, SECOND SEMESTER: English 14 (2); language (3); History 53 (3); Political Science 5 (3); Social Science 2 (4); electives; military science (2).

THIRD YEAR: pre-law major (12); pre-law minor (9); electives (9 to 15). Total, 32 or more hours.

FOURTH YEAR: 28 hrs. in the College of Law.

[1]Latin 1 and 2 are recommended for students not having entrance credit of 2 units in this subject.

F. CURRICULUM FOR THE DEGREES A. B. AND B. S. IN AGRICULTURE

Students who desire a broader training than that furnished in the curriculum leading to the degree in agriculture are reminded that, by proper arrangement of their courses, they may obtain both degrees in five years. Such students will normally take the degree in the College of Arts and Sciences first, usually with major work in the field of biology. Several courses given in the College of Agriculture and required for the degree in agriculture are accepted as regular electives in the College of Arts and Sciences; in addition to these the student is permitted to elect fifteen semester hours from courses in colleges other than the College of Arts and Sciences; these may all be taken in the College of Agriculture. A suggestive list of courses, most of which should be taken during the first four years, follows:

Chemistry 3, 4, and 31 or 36
(a) Biology 1 and Botany 4 and Zoology 3; or
(b) Botany 1 and 2 and Zoology 1 and 2
Physics 1, 2, 3, and 4
Economics 1 and 2 (or Economics 1 and Agricultural Economics 2)
Geology 1
Bacteriology 141
Entomology 2 (possibly 103 or 204 in addition)
Genetics 111 and 112 or 221
Plant Pathology 103 or 201
Animal Pathology 102 (possibly 206 also)
Animal Husbandry 2, 203
Agronomy 2 (Soils)

Also 15 hours from the following group; more if possible:

Poultry 1
Agronomy 1
Horticulture 1
Dairy Husbandry 1
Animal Husbandry 102

In many of the organizations which employ men trained in agriculture the broader training suggested should give the student much greater prospect of employment. He should, of course, have the necessary agricultural background of a certain period of residence on a farm; the student who does not have this will be required, as are all candidates for the degree in agriculture, to satisfy the faculty of the College that he qualifies in this regard.

The specific course requirements and the group requirements as well as major and minor departmental requirements in the College of Arts and Sciences must be satisfied.

PRE-PROFESSIONAL COURSES

Not leading to degrees in the College of Arts and Sciences

(A) PRE-NURSING CURRICULUM

The following arrangement of courses is worked out for the general guidance of students who are preparing for the profession of nursing. This curriculum includes all subjects generally required by professional schools of nursing. The tendency in nursing education is toward the establishment of

a requirement of at least two years of college work preparatory to entering the school of nursing. Students are advised to use their elective hours in the direction of a broad, general education and, if possible, to complete the requirements for the A. B. degree.

FIRST YEAR, FIRST SEMESTER: English 1 (3); Chemistry 3 (4); Zoology 1 (4); language (or elective) (3); physical education (1). Total, 15 hrs.

FIRST YEAR, SECOND SEMESTER: English 2 (3); Chemistry 4 (4); Zoology 2 (4); language (or elective) (3); physical education (1); elective (3). Total, 15 to 18 hrs.

SECOND YEAR, FIRST SEMESTER: English literature (3); language (or elective) (3); Sociology 1 (3); Psychology 1 (3); physical education (1); elective (3). Total, 16 hrs.

SECOND YEAR, SECOND SEMESTER: English literature (3); language (or elective) (3); Sociology 3 (3); Psychology 10 (3); physical education (1); elective (5). Total, 18 hrs.

THIRD AND FOURTH YEARS

Students are advised to select psychology, sociology, or zoology as a major subject and one other subject in this group as a minor. If possible the student should select the School of Nursing which she proposes to enter and use her electives in meeting the pre-professional requirements or recommendations of that particular school.

(B) PRE-PROFESSIONAL SOCIAL WORK

An undergraduate pre-professional social-work curriculum was developed in 1938 in the sociology department, and the name of that department was changed to "sociology and public welfare." The purpose of this pre-professional curriculum is to prepare students for entrance into graduate schools of social work (education for social work is on a graduate basis in all accredited schools of social work), and this undergraduate program includes broad and intensive preparation in the social sciences and related fields. Fundamental courses in economics, history, political science, psychology, and sociology are required. These courses will meet all the necessary requirements of students who plan to enter the department of social administration, West Virginia University, or other graduate schools of social work; they will also fulfill the requirements of the American Association of Social Workers with reference to the 15 semester hours of social and biological science which are required for junior membership as well as the 20 semester hours required for full membership.[1]

(C) PRE-EDUCATION

Candidates for the degree of Bachelor of Science in Education are registered in the College of Arts and Sciences until they have completed 58 hours or more of academic work in the lower division of the College, with an honor-point average of 1.0. They are then transferred to the College of Education. During the Pre-Education period students are advised to complete as many

[1]For a detailed statement concerning the undergraduate social-work courses, see page 159.

as possible of the general courses required by the College of Education and for State certification, as shown in the General Catalogue.

In addition to the above general academic requirements students are advised to complete as many as possible of the required academic courses in two teaching fields. See the General Catalogue.

Upon the successful completion of the entire 64 hours of work in the lower division, Pre-Education students are eligible for the Junior Certificate of the College of Arts and Sciences.

TEACHING CERTIFICATES

The College of Education is authorized by the Board of Governors to recommend all applicants for teaching certificates.

Teaching certificates may be obtained by students registered in the College of Arts and Sciences as well as in the College of Education, provided they meet the requirements for teaching subjects.

For specific requirements in regard to certification see the Bulletin on Teacher Certification Regulations.

Candidates for the A. B. degree who wish to qualify for teaching certificates should indicate this fact to their adviser and plan their entire course with this in view. Unless this is done by the end of the freshman year, students may encounter difficulties in qualifying for the certificate by the time they receive the degree. As a check, consultation with Prof. Elizabeth M. Stalnaker, the adviser of Pre-Education students, should be had each semester.

(D) PRE-JOURNALISM CURRICULUM

Candidates for the degree of Bachelor of Science in Journalism are registered in the College of Arts and Sciences until they have earned at least 60 semester hours of college credit. During the freshman and sophomore years they should have completed all or most courses specified for pre-journalism majors.

A pre-journalism student who has not maintained at least a C average in all his college subjects during his first two years is strongly advised not to enroll in the professional school. If his average grade in English 1 and English 2 was less than B, he should register for English 13 during his sophomore year. Before or soon after entering the University a prospective journalism student should master the touch system of typewriting, and before completing his sophomore year he is urged to have learned shorthand.

The recommended pre-journalism curriculum follows:

First Year

First Semester	*Hrs.*	*Second Semester*	*Hrs.*
Eng. 1—Comp. and Rhet.	3	Eng. 2—Comp. and Rhet.	3
Hist. 1—Europe to 1815	3	Hist. 2—Europe Since 1815	3
Science	4	Science	4
Foreign language	3	Foreign language	3
Phys. ed. (men and women)	1	Phys. ed. (men and women)	1
Military science (men)	1	Military science (men)	1
Electives	1-2	Electives	1-2
	16		16

Second Year

First Semester	*Hrs.*	*Second Semester*	*Hrs.*
Jour. 1—Newspaper Report.	3	Jour. 2—Newspaper Report.	3
Hist. 52—Hist. of U. S.	3	Hist. 53—Hist. of U. S.	3
Foreign language (if needed)	3	Foreign language (if needed)	3
Econ. 1—Prin. of Econ.	3	Econ. 2—Prin. of Econ.	3
Psych. 1—Intro. to Psych.	3*	Pol. Sc. 5—Am. Fed. System	3
Mil. science (men)	2	Mil. science (men)	2
Phys. ed. (women)	1	Phys. ed. (women)	1
Electives	0-7	Electives	0-4
	16-17		16-17

EXTENSION COURSES

As a part of the University Extension Service the College of Arts and Sciences and the College of Education from time to time have conducted at several centers in various parts of the State extension courses for which regular college credit has been given. The work given in the extension courses corresponds in every particular, as to class requirements and credits, with that given in similar courses on the campus. Similar extension courses will be provided in other parts of the State when the facilities of the University will permit.

The giving of extension courses is subject to the following conditions: (1) Courses will not be organized at any place unless the demand is sufficient to justify it. (2) Courses offered by resident instructors will be given in Morgantown and in nearby places easy of access, generally on Friday afternoons and Saturdays. (3) Regular extension instructors will offer courses only in such places as can be reached from their headquarters.

*A sophomore expecting to become a high-school teacher will choose an elective in his intended teaching field as a substitute for Psychology 1, and in his junior year will take Education 106, Educational Psychology.

THE DEPARTMENTAL REQUIREMENTS

THE COURSES OF INSTRUCTION

The General Introductory Courses

The four general introductory courses, which cut across departmental lines, are designed to give the student a broad general education. They are recommended especially for those students who have not yet chosen a field of specialization. They will also be found useful in providing a general knowledge of subjects not covered by the student's field of major interest and in providing a broader perspective for later concentration in certain fields. These courses may be taken by any lower-division student in the College of Arts and Sciences or, with the consent of the dean or adviser, by students in other colleges or schools of the University. The courses are also open to upper-division students, but such students may count honor points only at the rate of one honor point per credit hour.

I. THE HUMANITIES

This course is designed to bring to the student's attention cross-sections of his civilization at those points where its development has been most significant. In accordance with this aim a substantial part of the course is its background of history, to which are added a survey of world literature, enough philosophy to acquaint the student with the principal thought patterns employed by Western man, the main developments in art and architecture, and some music.

The assigned readings constitute the most important feature of the course, in that they supply most of the factual material. Lectures are primarily for the purpose of orientation — to help the student interpret the readings. Lectures on art, architecture, and music are illustrated. Weekly discussion periods are also an important part of the course. In them students meet in small groups with an instructor, and an effort is made to help them undertsand the relation of the past to present-day problems Through the aid of a syllabus. the course is shown in perspective in order that it may be better conceived as a whole.

1, 2. **General Introductory Courses in the Humanities.** I and II. 4 Hrs. per semester. Staff

II. THE PHYSICAL SCIENCES

The Introductory Course in the Physical Sciences is intended to acquaint the student with the physical world in which he lives and has two main objectives: (1) to serve as an orientation course for those students who have not chosen their major field of interest, and (2) to present a broad general view of the physical sciences to students whose interests lie in other fields.

In its present form the course will carry four credit hours for each of two semesters. Two periods of each week will be devoted to formal lectures and desk demonstrations; one period a week will be used for discussion and quiz when the lecture sections will be divided into small groups; and one period a week will be devoted to laboratory demonstrations, museum displays, and field trips. Motion picture films will be used in connection with certain phases of the course. The syllabus is designed to give a general view of the whole field of the physical sciences as well as serve as a guide for weekly lectures, readings, and discussions.

1, 2. **General Introductory Course in the Physical Sciences.** I and II. 4 Hrs. per semester. Staff

III. THE SOCIAL SCIENCES

The general course in the social sciences is designed primarily for sophomores and is intended to give the student an understanding of the society in which he lives, with some indication of political, social, and economic trends which may alter this society in the future. It is based upon a plan of two lectures and two discussion periods each week. At the discussion periods the content of the lectures for the week will be carefully analyzed, and concrete illustrations of principles expressed in the lectures will be studied.

For each lecture there will be certain required readings and a list of optional readings for students who desire to learn more about certain questions.

1, 2, General Introductory Course in the Social Sciences. I and II. 4 Hrs. per semester. Staff

IV. THE BIOLOGICAL SCIENCES

***1, 2. General Introductory Course in the Biological Sciences.** I and II. 4 Hrs. per semester.

Art

Assistant Professor PATTON

The department of art offers technical courses in drawing, painting, and design; a non-technical course in appreciation; and lecture courses in the history of the arts. Effort is made to provide for the needs of those interested in the cultural aspects of the arts, to meet the requirements of students planning further work of a technical nature, and to enable students in Education to meet the requirements for certification as art teachers.

For art majors the following lower-division program is recommended: laboratory science (4); Humanities 1 (4); military science (1); physical education (1). Total, 16 hrs.

FIRST YEAR, SECOND SEMESTER: English 2 (3); foreign language (3); laboratory science (4); Humanities 2 (4); military science (1); physical education (1). Total 16 hrs.

SECOND YEAR, FIRST SEMESTER: English 3 (3); foreign language (3); Art 11 (3); Art 30 (3); military science (2); physical education (1); elective (2). Total, 17 hrs.

SECOND YEAR, SECOND SMESTER: English 4 (3); foreign language (3); Art 12 (3); military science (2); physical education (1); elective (5). Total, 17 hrs.

COURSES OF INSTRUCTION

11, 12 or 111, 112. Representation. I, II. 3 Hrs. per semester. Freehand drawing.

113, 114. Representation. I, II. 3 Hrs. per semester. Painting. PR: Art 11, 12.

121, 122. Fundamentals of Design. I, II. 3 Hrs. per semester.

30 or 130. Appreciation of Art. I. 3 Hrs. Enjoyment of architecture, painting, sculpture, and the minor arts.

105, 106. Survey of Art. I, II. 3 Hrs. per semester. History of art from prehistoric times to the present. Offered in 1941-42 and alternate years.

109. Art of the Renaissance. I. 3 Hrs.

110. Modern Art. II. 3 Hrs.

151, 152. I, II. 3 Hrs. per semester. Special problems.

*In preparation.

Botany and Zoology

Professors STRAUSBAUGH, REESE, SPANGLER, and TAYLOR; Assistant Professors AMMONS, CORE, and GRIBBLE; Instructors RITCHIE and SCHEER

CURRICULUM FOR BOTANY MAJORS

Courses in chemistry, physics, zoology, or geology may be selected by those botany majors who wish to minor in one of these fields (64 hours required in each division).

NOTE: Credit hours are shown in parentheses after course designations

Lower Division

English composition (6); German (12); Botany1 and 2 (or Biology 1) (8); French (6); physchology (6); English literature (6); military science (6); physical education (2). Total required, 50 hrs.

Electives: Chemistry 1 and 2 (8); Botany 30 (4); Zoology 1 and 2 (8); Botany 31 (4). Total electives, 24 hrs.

Upper Division

Physics 1, 2, 3, and 4 (8); education (for teacher's certificate) (20); geology (6); Botany 211 (4) and 212 (4); 221 (4); 230 (4); 234 (4); 254 and 225 (2). Total required, 56 hrs.

Electives: Bacteriology 141 (4); genetics (3); Botany 222 (4). Total electives, 11 hrs.

CURRICULUM FOR ZOOLOGY MAJORS

Lower Division

FIRST YEAR: Biology 1 or Zoology 1 (4); Zoology 2 (4); Chemistry 1 or 3 (4), 2 or 4 (4); English 1 (3) and 2 (3); foreign language (6); physical education (2); military science (2). Total, 32 hrs.

SECOND YEAR: Botany 1 (4) and 2 (4); Physics 1, 2, 3, and 4 (8); foreign language (6); English 3, 4, or 65 (3); Public Speaking 3 or 11 (3); History 1 and 2 (6); military science (4) or physical education (2).

Upper Division

1. 18 to 24 hours selected from the following courses accepted in the major subject: Animal Pathology 102 and 206; Cytology 210; Entomology 102, 103, 104; Genetics 221; Zoology 105, 116, 118, 151, 207, 210, 230, 232, 233, 234, 235, 236, 237, 238, 240, 250-255, 261S.
2. A minor sequence of 9 to 12 hours of upper division courses in some department closely related to the work of the major department.
3. Electives to complete a total for the four years of 128 hours

COURSES OF INSTRUCTION
BIOLOGY

1, 2. General Biology. I and II. 4 Hrs. per semester. Staff

Graduate Division

350, 351, Seminar. I and II. 1 Hr. per semester.
Mr. Leach and Mr. Cartledge

BOTANY

Lower Division

1, 2. **General Botany.** I and II. 4 Hrs. per semester. Miss Ammons

4. **Elementary Botany.** II. 4 Hrs. PR: Biology I. For students of Agriculture only. Mr. Strausbaugh and Mr. Spangler

21, 121. **Plant Physiology.** I. 4 Hrs. Primarily for students in forestry. Mr. Strausbaugh

30 or 130. **Systematic Botany.** II. 4 Hrs. Identification of seed plants and a study of their classification. Mr. Core

31 or 131. **Plant Ecology.** I. 4 Hrs. Environmental relationships of plants. Mr. Strausbaugh and Mr. Core

Upper Division

211, 212. **Plant Morphology.** I, II. 4 Hrs. Development and structure of plants. Mr. Spangler

213. **Plant Anatomy.** I. 2 Hrs. PR: Botany 1 and 2 and 30 or 130. Miss Ammons

221. **Plant Physiology.** I. 4 Hrs. Functions of plants. PR: Biology 1 or Botany 1 and 2, and a general course in chemistry. Mr. Strausbaugh

222. **Advanced Plant Physiology.** II. 4 Hrs. PR: Botany 221; also course in general physics and organic chemistry. Mr. Strausbaugh

230, 231. **Advanced Systematic Botany.** I and II. 1 to 6 Hrs. (maximum). Choice of work in any groups of the plant kingdom. Staff

234. **Experimental Ecology.** II. 4 Hrs. PR: Biology 1 and Botany 131. Mr. Strausbaugh

235S. **Field Studies in Botany.** S1. 6 Hrs. Essentially physiographic ecology, planned for botany majors and to meet the needs of those who intend to teach or are teaching botany. The studies will be conducted in various interesting regions of the state and the entire time will be spent in the field. Mr. Strausbaugh

254, 255. **Seminar.** I and II. 1 Hr. per semester. Current literature and history of botany. Staff

Graduate Division

380, 381, 382, 383, 384. **Research.** I and II. 1 to 6 Hrs. Staff

For courses in plant pathology see page 96.

ZOOLOGY

Lower Division

1. **Invertebrate Zoology.** I. 4 Hrs. Mr. Reese and Staff

2. **Vertebrate Zoology.** II. 4 Hrs. PR: Biology 1 or Zoology 1. Mr. Reese and Staff

3. **General Zoology.** II. 4 Hrs. PR: Biology 1. For students in Agriculture and Forestry. Mr. Reese and Staff

5 or 105. **Ornithology.** II. 2 Hrs. Field and laboratory studies on the identification, migration, protection, nesting and food habits of birds. Mr. Brooks

16 or 116. **Economic Zoology.** II, 2 Hrs. Ways in which animals are useful or harmful to man. Mr. Reese

51 or 151. **Human Physiology.** II. 4 Hrs. Mr. Scheer

Upper Division

118. Methods of Zoology. II. 3 Hrs. Theory and practice of making microscopic preparations, etc. PR: Zoology 2 or equivalent. Primarily for zoology majors. Mr. Taylor

207. Vertebrate Embryology. I. 3 Hrs. An introductory study of the development of vertebrates, based chiefly on the frog, fowl, and mammal. PR: Zoology 2. Mr. Reese

210. Principles of Evolution. II. 3 Hrs. Mr. Reese

230. Advanced Osteology. II. 2 Hrs. PR: Zoology 2. Alternate years. Mr. Gribble

231. Comparative Anatomy. I. 4 Hrs. Organs and systems of various vertebrates, together with other facts of interest concerning these animals. PR: Zoology 2 or equivalent. Mr. Gribble

232. Comparative Neurology. II. 2 Hrs. PR: Zoology 2 or equivalent. Alternates with Zoology 233. Mr. Gribble

233. Advanced Comparative Anatomy. II. 3 Hrs. PR: Zoology 231. Alternates with Zoology 232. Mr. Gribble

234. Histology. I. 2 Hrs. The microscopic study of the tissues and organs of vertebrates. Not open to pre-medical students. PR: Zoology 2. Mr. Taylor

235. Advanced Invertebrate Zoology. II. 3 Hrs. PR: Zoology 2. Mr. Taylor

236. Animal Behavior. I. 3 Hrs. PR: Zoology 2. Alternates with Zoology 237. Mr. Taylor

237. Animal Ecology. I. 3 Hrs. PR: Zoology 2. Alternates with Zoology 236. Mr. Taylor

238. Comparative Physiology. I. 4 Hrs. PR: Zoology 2. Mr. Scheer

240. Seminar. I and II. 1 Hr. Current Literature. For seniors and graduate students. Mr. Reese and Mr. Taylor

250, 251, 252, 253, 254, 255. Advanced Zoology. I and II. 1 to 4 Hrs. Courses in zoology adapted, as far as possible, to needs of individual students. Staff

261S. Field Zoology. SI. 6 Hrs. Primarily for zoology majors and for those who teach or intend to teach zoology. This course aims to familiarize the student with the animal life of the state in its natural surroundings and includes the collection, identification and classification, and study of habits of the various forms found in this region. PR: Zoology 2 or equivalent. Mr. Taylor

Graduate Division

380, 381, 382, 383, 384. Research. I and II. 1 to 6 Hrs. Staff

For courses in entomology, genetics, and animal pathology see the courses in Agriculture, page 89.

Chemistry

Professors CLARK, JACOBSON, SAMUEL MORRIS, HUBERT HILL, DUSTMAN, DAVIES, and COLLETT; Associate Professors DEATRICK and LAZZELL; Assistant Professor GIBSON

Chemistry 1, 2, and 9; or Chemistry 3 and 4 are prerequisite to all courses in chemistry. Chemistry 5, 6, 233, 238, 260, and 261; Mathematics[4] 107 and 108;

[4]If mathematics is elected as a minor, an additional 3-hour course beyond calculus (usually Differential Equations) is required.

minimum one year of Physics[5] are required of candidates for the A. B. degree whose major is chemistry. Exceptions are sometimes made for students entering with advanced standing.

Students entering the University with the intention of studying chemistry as a profession leading to a degree in the College of Arts and Sciences, with major in chemistry, should take Mathematics 3 and 4 and Chemistry 3 during the first semester of their first year.

A deposit is required of all students who take laboratory courses.

BACHELOR OF SCIENCE IN CHEMISTRY

The requirements for the Bachelor of Science in Chemistry degree are essentially the same as the requirements for the Bachelor of Arts degree with the major in chemistry for all non-chemical courses, except that a definite requirement for calculus is established. The distinction lies mainly in the extra chemistry (elective) requirements.

Freshman	*Hrs.*	Sophomore	*Hrs.*	Junior	*Hrs.*	Senior	*Hrs.*
Chem. 3 & 4	8	Chem. 5	4	Chem. 233	5	Chem. 260	5
English	6	Chem. 6	5	Chem. 238	5	Chem. 261	5
Foreign lang.	6	Foreign lang.	6	Calculus 108	4	Chem. 251, 252	
Mathematics 3	4	Math. 5	4	Chem. electives	6	(Ind. Chem.)	6
Mathematics 4	2	Math. 107	4	Other electives	4	Chem. electives	6
Electives	4	Electives (not		Physics 105, 106	5	Other electives	11
Physical Ed.	2	chemistry)	8	Physics 107, 108	5		—
Military	2	Military	4		—		
	—		—				
	34		35		34		33

COURSES OF INSTRUCTION[1]

Lower Division

1. **General Chemistry.**[2] I, II. 4 Hrs. Recommended for students in the College of Arts and Sciences and the College of Education. Primarily for freshmen. Mr. Morris
2. **General Chemistry.** I, II. 4 Hrs. Recommended for students in the College of Arts and Sciences and the College of Education. Primarily for freshmen. PR: Chemistry 1. or equivalent. Staff
3. **Inorganic Chemistry.**[3] I, II. 4 Hrs. Required of students in the College of Agriculture, including home economics, the College of Engineering, pre-medical students, and pharmacy students. Primarily for freshmen. Mr. Morris
4. **Inorganic Chemistry.**[1] I, II. 4 Hrs. Required of students of the College of Agriculture, College of Engineering, pre-medical students, and pharmacy students. Primarily for freshmen. PR: Chemistry 3. Staff

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[1]Chemistry 1, 2, and 9, or Chemistry 3 and 4 are prerequisite to all other courses in chemistry. Three-year and four-year pre-medical students are referred to the General Catalogue for outline of required courses and for courses in physiological and pharmaceutical chemistry. A deposit is required of all students who take laboratory courses.

[2]Students desiring to take Chemistry 1 in the second semester may substitute Chemistry 3 if Chemistry 1 is not offered.

[3]Students entering with the idea of majoring in chemistry may take Chemistry 3 and 4 instead of Chemistry 1, 2, and 9.

[5]Physics 105, 106, 107, and 108 may count as a minor. If Physics 1, 2, 3, and 4 are offered, nine additional upper-division hours in physics are required to absolve the minor.

5 **or 105. Qualitative Analysis.** I. 2 or 4 Hrs. Chem. 9 may either precede or accompany this course. Required of students whose major is chemistry, and pharmacy students. Two lectures and two three-hour laboratory periods. Engineering students only may take this course for 2 hours' credit. PR: Chemistry 1, 2, and 9; or Chemistry 3 and 4.
Mr. Hill and Mr. Gibson

6 **or 106. Quantitative Analysis.** II. 3 to 5 Hrs. Chemistry 5 should precede this course wherever possible. Required of students whose major is chemistry, mining engineering, and pharmacy. PR: Chemistry 1, 2, and 9, or 3 and 4. Mr. Hill and Mr. Gibson

9. **Inorganic Chemistry.** I. 2 Hrs. Required of students who have taken Chemistry 1 and 2 and who desire further work in chemistry.
Mr. Morris

10. **Quantitative Analysis.** I. 2 Hrs. Primarily for engineering students. PR: Chemistry 3 and 4. Mr. Hill and Mr. Gibson

15 **or 115. Quantitative Analysis.** I, II. 3 Hrs. For pre-medical and chemical engineering students. Chemistry 9 may accompany this course. PR: Chemistry 3 and 4, or 1, 2, and 9. Mr. Hill and Mr. Gibson

31 **or 131. Organic Chemistry.** I. 4 Hrs. For students in agriculture and home economics. Chemistry 9 may accompany this course. PR: Chemistry 4 or 2 and 9. Mr. Dustman

36 **or 136. Organic Chemistry.** II. 6 Hrs. Required of pre-medical and pharmacy students. PR: for pre-medical students: Chemistry 15 and 63. PR: for pharmacy students: Chemistry 6. Mr. Lazzell

63 **or 163. Physical Chemistry.** I. 3 Hrs. Required of pre-medical students. Chemistry 9 may accompany this course. PR: Chemistry 4, or Chemistry 2 and 9. Mr. Davies

Upper Division

107. **Quantitative Analysis.** II. 2 Hrs. Continuation of Chemistry 15 and 115.
Mr. Hill and Mr. Gibson

108. **Quantitative Analysis.** I. 3 Hrs. PR: Chemistry 6, Physics 3 and 4, and Mathematics 5. Mr. Gibson

111. **Synthetic Inorganic Chemisry.** I, II. 4 Hrs. PR: Chem. 6 or 106.
Mr. Morris

141, 143. **Assigned Topics.** I. 1 to 5 Hrs. Staff

142, 144. **Assigned Topics.** II. 1 to 5 Hrs. Staff

162. **The Chemistry of Colloids.** II. 4 Hrs. Required of four-year pre-medical students. Mr. Davies

212. **Micro-Qualitative Analysis.** I or II. 2 or 3 Hrs. PR: Organic chemistry.
Mr. Hill and Mr. Gibson

214. **Organic Qualitative Analysis.** 1 or II. 3 Hrs. PR: Chemistry 238.
Mr. Jacobson

218. **Dairy Chemistry.** I. 3 Hrs. For students in the College of Agriculture. PR: for undergraduates, Chemistry 31; for graduates, Chemistry 6 or 15, and Chemistry 31 or 233. Mr. Dustman

233. **Organic Chemistry.** I. 5 Hrs. Required of students who major in chemistry, of students in chemical and mining engineering. PR: Chemistry 6. Mr. Clark and Mr. Lazzell

238. **Organic Chemistry.** II. 4 or 5 Hrs. PR: Chemistry 233.
Mr. Clark and Mr. Lazzell

247. **Stereochemistry.** I. 2 Hrs. Open to seniors. PR: Chemistry 238.
Mrs. Deatrick

251. **Industrial Inorganic Chemistry.** I. 3 Hrs. Mr. Clark

252. **Industrial Organic Chemistry.** II. 3 Hrs. Mr. Clark

260. **Physical Chemistry.** I. 3 to 5 Hrs. Required of chemistry majors and chemical engineering students, the latter for 3 hours' credit. PR: Chemistry 233, Physics 4, and Mathematics 108. Mr. Collett

261. **Physical Chemistry.** II. 3 to 5 Hrs. Required of chemical engineering students and chemistry majors. PR: Chemistry 260. Mr. Collett

274. **History of Chemistry.** II. 2 Hrs. Open to seniors. PR: Chemistry 6, or equivalent, and organic chemistry. Mr. Hill and Mrs. Deatrick

277. **Synthetic Drugs.** I or II. 2 Hrs. PR: Chemistry 238 or equivalent. Mr. Lazzell

Graduate Division

316. **Advanced Inorganic Chemistry.** II. 2 Hrs. PR: Chemistry 261. Mr. Morris

317. **Modern Plastics.** I or II. 2 or 3 Hrs. Mr. Jacobson.

343. **Advanced Organic Chemistry.** I. 4 Hrs. PR: Chemistry 238 or equivalent. Mr. Lazzell

345. **Theories of Organic Chemistry.** II. 2 Hrs. PR: Chemistry 343. Mr. Lazzell

367. **Advanced Physical Chemistry.** I. 3 Hrs. PR: Chemistry 261. Mr. Davies

368. **Advanced Physical Chemistry.** II. 3 Hrs. PR: Chemistry 367. Mr. Davies

380. **Electrochemistry.** I. or II. 3 Hrs. PR: Chemistry 238 and 261. Mr. Collett

383. **Advanced Quantitative Analysis** I or II. 3 Hrs. PR: Chemistry 6, 238, 261. Mr. Jacobson and Mr. Hill

389. **Chemical Thermodynamics.** I. 2 Hrs. PR: Chemistry 261 and Mathematics 208. Offered in 1942-43 and alternate years. Mr. Gibson

390. **Chemical Thermodynamics.** II. 2 Hrs. Chemistry 389. Offered in 1942-43 and alternate years. Mr. Gibson

391, 392. **Journal Meeting and Seminar.** I and II. 1 Hr. per semester. Required of students working for graduate degrees with major in chemistry. Recommended as a minor for students from other departments. Mr. Clark and Staff

395, 396. **Special Topics.** I and II. 1 to 3 Hrs. per semester. Chemistry of the carbohydrates, organic nitrogen compounds, the phase rule, dyes and dye intermediates, the phase rule, chemistry and colloids, food analysis, study of chemical literature as preparation for research, chemical microscopy and chemical crystallography, valence and molecular structure, and advanced chemistry are suggested topics. Staff

397, 399, 398, 400. **Research.** I and II. 1 to 6 Hrs. per semester. 6 Hrs. required for the Master's degree. More than 6 Hrs. each semester may be carried by candidates for a higher degree. Staff

Classics

Professor BROUZAS

The department of classics offers courses in the Greek and Latin languages and in classical civilization. Courses in the department are intended not only to give students a thorough knowledge of the Greek and Latin languages and literature, but also to acquaint them with the classical culture in general. A student with major in Latin should plan to include at least 6 hours of Greek in his course, preferably in the sophomore year.

Courses suggested for classics majors with English as a second teaching field for certification in West Virginia:

NOTE: Credit hours are shown in parentheses after course designations.

FIRST YEAR, FIRST SEMESTER: English 1 (3) and 3[1] (3); Latin (according to preparation) (3); laboratory science[2] (4); physical education (1); elective (2). Total, 16 hrs.

FIRST YEAR, SECOND SEMESTER: English 2 (3) and 4[1] (3); Latin (3); laboratory science[2] (4); physical education (1); elective (2). Total, 16 hrs.

SECOND YEAR, FIRST SEMESTER: English 65[1] (3); Latin (3); Greek 1 (3); sociology or economics (3); physical education (1); elective (3). Total, 16 hrs.

SECOND YEAR, SECOND SEMESTER: Journalism 15[1] (3); Latin (3); Greek 2 (3); sociology or economics (3); public speaking[1] (3); elective (2). Total, 17 hrs.

COURSES OF INSTRUCTION

LATIN

Lower Division

1. **Elementary Latin.** I. 3 Hrs. An intensive course in the elements of the Latin language, consisting of the completion of a standard beginner's book and a simple elementary reader.
2. **Elementary Latin.** II. 3 Hrs. A continuation of Latin 1, consisting of the study of a standard second-year book
3. **Intermediate Latin.** I. 3 Hrs. Selections from Caesar, Aulus Gellius, Nepos, and from other authors of comparable ease, designed to prepare students to read the orations of Cicero and other Latin of similar difficulty. PR: Latin 2 or two units of high-school Latin.
4. **Cicero's Orations.** II. 3 Hrs. PR: Latin 3, or 2 units of high-school Latin.
5. **Latin for law Students: Selection from Legal Latin and the Institutes of Justinian.** II. 3 Hrs. PR: Latin 3, or 2 units of high-school Latin.
6. **Vergil's Aeneid.** II. 3 Hrs. PR: Latin 4, or 3 units of high-school Latin
12. **Selections from Roman Prose.** I. 3 Hrs. Selections from Roman prose literature from Cato to the end of the Silver Latin period. PR: Latin 4 and 6. Offered in 1941-42 and alternate years.
14. **Roman Comedy.** I. 3 Hrs. Plautus, Captivi, or Menaechmi; Terence, Adelphoe, or Andria. PR: Latin 4 and 6, or 4 units of high-school Latin.
21. **Roman Letter Writing.** II. 3 Hrs. Selections from the letters of Cicero, Pliny, Marcus Aurelius, and Fronto. PR: Latin 4 and 6, or 4 units of high-school Latin. Offered in 1941-42 and alternate years.
22. **Selections from Roman Poetry.** I. 3 Hrs. Selections from the elegiac, lyric, and iambic poets and from Martial's epigrams. PR: Latin 4 and 6, or equivalent. Offered in 1941-42 and alternate years.
23. **Livy and Cicero.** II. 3 Hrs. Selections from Livy books 21 and 22; Cicero's De Senectute or De Amicitia. PR: Latin 14 and 21, or equivalent

[1]Students wishing to offer social science for certification may substitute history for this course.

[2]Students who wish to have social studies as the second teaching field may elect geology for the laboratory science.

24. **The Lyric and Bucolic Poets.** II. 3 Hrs. Selections from Horace's Odes and Epodes; from Catullus and other poets; selections from the Bucolics of Vergil and Calpurnius.

25. **Latin Composition.** II. 3 Hrs. A review of the principles and syntax of the Latin language, and practice in writing simple Latin. PR: Latin 14 and 21, or equivalent.

Upper Division

130. **Leadership in Classical Club.** II. 2 Hrs. Materials for enriching, vivifying, and making Latin concrete; Latin posters, scrap books, Latin derivatives in English and modern languages, Latin playlets, Latin mottoes, proverbs, mythological allusions, etc. PR: Four years of high-school Latin or twelve hours of Latin taken in college. Offered every other year. Approved for high-school certification in co-curricular activity. Offered in 1941-42 and alternate years.

201. **The Story and Novel.** I. 3 Hrs. The story and novel from Homer to Apuleius. Select readings from Petronius and Apuleius. PR: Latin 12, 14, 21, 22, or equivalent.

202. **Drama.** II. 3 Hrs. The ancient drama, its origin, and development. Select dramas. PR: Latin 12, 14, 21, 22, or equivalent.

203. **Roman Oratory.** II. 3 Hrs. Selections from Cicero's works on oratory and from Quintilian. Select orations of Cicero. PR: Latin 12, 14, 21, 22, and 24, or equivalent.

227. **Vulgar Latin—Prose and Verse.** I. 3 Hrs. Selections from old Latin literature and from late and mediaeval Latin writers. Lectures on the history of the Latin language, and the formation of the Romance languages. PR: Latin 12, 14, 21, and 24, or equivalent. Offered in 1941-42 and alternate years.

231. **Satire.** II. 3 Hrs. Horace, Satires and Epistles; selections from Juvenal and Persius. PR: Latin 12, 14, 21, and 22, or equivalent.

234. **History.** I. 3 Hrs. Selections from Livy, and Tacitus, Agricola, or Annals; Suetonius, Life of Julius or Augustus, Sallust, Catiline. PR: Latin 12, 21, and 24, or equivalent. Offered in 1941-42 and alternate years.

235. **Epic.** I. 3 Hrs. Vergil's **Aeneid** and the later Epic. PR: Latin 12, 22, and 24, or equivalent.

236. **Philosophy.** II. 3 Hrs. Cicero's **Tusculan Disputations** or **De Officiis**; Seneca's **Dialogues** and **Epistles**. PR: Latin 12, 21, 22, and 24, or equivalent.

Graduate Division

381, 382. **Seminar.** I and II. 3 Hrs. per semester. Research course

CLASSICAL CIVILIZATION[1]

Upper Division

237. **Greek and Roman Religion and Art.** I. 3 Hrs. A study of the Greek and Roman religious ideas and myths, with particular emphasis on their influence upon the art and literature of the ancient and the modern world.

239. **Greek and Roman Life and Thought.** I. 3 Hrs. A survey of Greek and Roman culture and thought as reflected in classical literature. PR: Greek 1 and 2, Latin 12 and 22, or equivalent.

[1]These courses are offered as being of cultural value to all students. They present a picture of a cross-section of the Greek and Roman society, life, manners, thought, literature, art, science, and law. The study of the influence of classical antiquity upon the subsequent periods prepares one for a better appreciation of modern civilization. Each course may be taken separately, if so desired.

GREEK

Lower Division

1. **Elementary Greek.** I. 3 Hrs. A course in the elements of the Greek language. Offered in 1941-42 and alternate years.
2. **Selections from Greek Literature.** II. 3 Hrs.

Economics and Business Administration

Professors HAYGOOD and DADISMAN; Assistant Professors COOLEY and KELLER; Instructors BALDWIN, JOHNSON, and WHERRY

The department offers courses leading to the A. B. degree with major in economics, and the B. S. degree with major in business administration. To be recommended for either degree by the department, a student must have earned an honor-point standing of at least 1.5 in all courses in economics and business which are to count toward the degree.

CURRICULUM FOR THE A. B. DEGREE WITH MAJOR IN ECONOMICS

A candidate for this degree is required to complete 128 college hours. For the major, at least 24 hours of upper-division courses in economics (certain courses in business also may count) must be passed successfully, and no more than 40 hours in economics and business may be counted toward the degree. At least 54 hours of the 128 required must be upper-division courses (i.e., those numbered 100 or above).

The program required for those majoring in economics is as follows:

First year: English 1 and 2, 6 hours.; foreign language (French or German recommended) 6 hrs.; humanities 8 hrs. or history 6 hrs.; science with laboratory 8 hrs.; physical education 2 hrs.; and military science (for men) 2 hrs.

Second year: English literature (or advanced composition for those who made less than B in English 1 or 2) 6 hrs.; Economics 1 and 2, 6 hrs.; foreign language* 6 hrs.; sociology or political science 6 hrs.; military science (for men) 4 hrs.; and electives (Business 5 and 6 are recommended).

Third and Fourth Years: Economics 131, Statistics, and either Economics 251, History of Economic Thought, or Economics 252, Advanced Economic Theory, are required. The following courses in economics are recommended: 111, Money and Banking; 113, Corporations and Trusts, or 114, Corporation Finance; 240, Labor Problems, and 262, Public Finance. Six hours of sociology should be included. For electives, the student planning to pursue graduate work in economics should take Economics 132, Statistics.

The candidate should select one of the following fields as his minor: philosophy or psychology, political science, history, or sociology, unless some other field, proposed by the student, receives the approval of his adviser. Nine to 12 hours of upper-division courses are required for a minor. At least 6 hours each of sociology and political science are required of all majors in economics.

The following fields are recommended for electives: philosophy or psychology, political science, sociology, or history. It is especially recommended that students have at least 6 hours of history, chosen from the following pair courses: 52-53; 133-134; 241-242; 258-259; 265-266. Preference should be given History 133-134.

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*Foreign language is not required in the sophomore year if the work in the freshman year was based upon two units of the same language in high school.

CURRICULUM FOR THE B. S. DEGREE WITH MAJOR IN BUSINESS ADMINISTRATION

For this degree the candidate is required to complete a total of 132 college hours, of which 39 must be in economics and business subjects for the major. The maximum number of hours permitted in economics or business administration is 54. A minimum of 54 of the 132 hours required must be upper-division courses (i.e., those numbered 100 or above). For the minor, 9 to 12 hours of upper-division work in another department are required.

The required course for those seeking the degree of B. S. in business administration is as follows:

First year: English 1 and 2, 6 hrs.; foreign language 6 hrs.; humanities 8 hrs. or history 6 hrs.; science with laboratory 8 hrs.; physical education 2 hrs.; and military science (for men) 2 hrs.

Second Year: Foreign language 6 hrs.;* Mathematics 2 or 3 (Algebra), 3 or 4 hrs.; Business 5 and 6, Accounting, 6 hrs.; Economics 1 and 2, 6 hrs.; social science general course 8 hrs., or history (52 and 53 recommended) 6 hrs., or political science (4 and 5 recommended) 6 hrs.; military 4 hrs. (physical education for women, 2 hrs.)

Third and Fourth Years: Economics 131 and 132, Statistics, 6 hrs. Business 121, Marketing, 3 hrs. The following are recommended: Business 141, 142, Business Law, 6 hrs.; Economics 111, Money and Banking, 3 hrs.; Economics 113, Corporations and Trusts, 3 hrs.; Economics 114, Corporation Finance, 3 hrs.; and electives. For electives, History 133 and 134 are recommended.

COURSES OF INSTRUCTION

ECONOMICS

Lower Division

1. **Principles of Economics.** I, II. 3 Hrs. An introduction. All students majoring in the department must pass Economics 1 and 2 before registering for upper-division courses. Mr. Haygood and Staff

2. **Principles of Economics.** I, II. 3 Hrs. Continuation of Economics 1. Mr. Haygood and Staff

Upper Division

103. **Economics and Accounting.** I. 3 Hrs. Principles of primary importance to engineering students. Mr. Cooley

111. **Money and Banking.** I. 3 Hrs. Our system of monetary and banking arrangements, viewed in reference to the functioning of the economic system as a whole. PR: Econ. 1 and 2. Mr Keller

113. **Corporations and Trusts.** I. 3 Hrs. Analysis of business organizations with emphasis upon the corporate form; history, operation, and control of natural monopolies, pools, trusts, holding companies, and mergers. PR: Econ. 1 and 2. Mr. Baldwin

114. **Corporation Finance.** II. 3 Hrs. The corporate factor in our present-day economic life with particular reference to its financial aspects. Mr. Keller

115. **Investments.** II. 3 Hrs. Organization, operation, and regulation of securities markets; principles of security analysis for investment purposes. PR: Econ. 1 and 2. Staff

131, 132. **Statistics.** I, II. 3 Hrs. per semester. Methods of collecting, presenting, analyzing, and interpreting statistical data, with special re-

*Foreign-language requirement is the same as for the A. B. degree.

ference to index numbers, trends, and forecasting. Economics 132 is continuation of Economics 131. PR: Econ. 1 and 2. Mr. Johnson

144. **Public Utilities.** I. 3 Hrs. Development of public-utility regulation. Other problems stressed are valuation and the "Federal Power Policy." PR: Econ. 1 and 2. Mr. Johnson

151. **Business Cycles.** I. 3 Hrs. Industrial fluctuations with emphasis on possible causes and remedies. PR: Econ. 1, 2, and 131. Mr. Johnson

173. **Economics of Consumption.** I. 3 Hrs. Problems of the consumer in modern economic society; efforts to improve the position of the consumer. Mr. Haygood

200. **Land Economics.** I. 3 Hrs. A land-policies course dealing with the characteristics, utilization, and conservation of urban, rural, mineral, forest, and recreational land. PR: Econ. 1 and 2. Mr. Dadisman

201. **Real Estate.** II. 3 Hrs. Principles and practices of the business of real estate. PR: Econ. 1 and 2. Mr. Dadisman

216. **Central Banking.** II. 3 Hrs. Public-interest aspects of central banking, particularly as brought to light by examination of the Federal Reserve System. PR: Econ. 111. Mr. Keller

217. **International Monetary Economics.** II. 3 Hrs. International economic relations in terms of their monetary aspects. PR: Econ. 111. Mr. Keller

240. **Labor Problems.** II. 3 Hrs. Origin and nature of modern labor problems; methods of solution practiced and proposed; organization, legislation, insurance, reform programs. PR: Econ. 1 and 2. Mr. Haygood

241. **Transportation.** I. 3 Hrs. Nature, history and problems of inland transportation, with special reference to the United States. PR: Econ. 1 and 2. Mr Dadisman

251. **History of Economic Thought.** I. 3 Hrs. Economic ideas in the perspective of their historic development. PR: Econ. 1 and 2. Offered in 1941-42 and alternate years. Mr. Keller

252. **Advanced Economic Theory.** I. 3 Hrs. Recent developments in economic theory, such as those relating to imperfect competition, monetary problems, and collectivist economy. PR: Econ. 1 and 2. Mr. Keller

255. **Comparative Economic Systems.** II. 3 Hrs. Economic principles underlying capitalism, socialism, Naziism, communism, and cooperatives. PR: Econ. 1 and 2. Mr. Baldwin

261. **Taxation.** I. 3 Hrs. The specific taxes making up the federal, state, and local tax systems. PR: Econ. 1 and 2, or consent of instructor. Mr. Haygood

262. **Public Finance.** II. 3 Hrs. Principles of public revenues; governmental expenditures; financial administration in the United States and abroad. PR: Econ. 1 and 2, or consent of instructor. Mr. Haygood

290, 291. **Seminar.** I, II. 2 or 3 Hrs. Current literature. For seniors and graduates. Staff

Graduate Division

318, 319. **Selected Monetary and Banking Problems.** I, II. 3 Hrs. Individual graduate study. PR: Econ. 111 and either Econ. 216, Econ. 217, or Business 155. Mr. Keller

340. **Advanced Labor Problems.** II. 3 Hrs. Critical study of selected industrial problems in America. PR: Econ. 240 or concurrent registration. Mr. Haygood

343. **Ocean Transportation.** II. 3 Hrs. Foreign trade, ocean carriers, shipping services, and America's Merchant Marine. PR: Econ. 241. Mr. Dadisman

361. **Tax Problems.** I. 3 Hrs. Special problems connected with the various taxes in the federal, state, and local systems. PR: Econ. 261 or concurrent registration. Mr. Haygood

390, 391. **Research.** I and II. 2 or 3 Hrs. per semester. Staff

BUSINESS ADMINISTRATION

Lower Division

5, 6. **Principles of Accounting.** I, II. 3 Hrs. per semester. Construction and interpretation of commercial and industrial records. Business 6 is continuation of Business 5. Mr. Johnson and Mr. Wherry

Upper Division

101. **Intermediate Accounting.** I. 3 Hrs. Analysis of financial accounts and statements with particular emphasis upon the valuation of accounts, working capital and profit and loss analysis, comparative statements, and the source and application of funds. PR: Business 5 and 6. Mr. Cooley

102. **Advanced Accounting.** II. 3 Hrs. Accounting for partnerships and receivers. Home office and branch accounting; parent company and subsidiary accounting; consolidations and mergers; consolidated statements; foreign exchange; budgets. PR: Business 101. Offered in 1941-42 and alternate years. Mr. Cooley

110. **Principles of Accounting.** II. 2 Hrs. Financial and cost accounting, of primary importance to engineering students. Mr. Cooley

121. **Elements of Marketing.** I. 3 Hrs. The economic functions of marketing, principles of marketing industrial and consumer goods, and contemporary marketing problems, including price problems and governmental regulation. PR: Econ. 1 and 2. Mr. Johnson

122. **Marketing Management.** II. 3 Hrs. Designed to acquaint students by the case method with modern problems of sales management with particular attention to manufactured goods. PR: Business 121. Staff

126. **Modern Merchandising.** II. 3 Hrs. Retail-store organization, control, and other operating problems and policies in the present-day department store as well as the small-town outlet. PR: Business 121. Staff

127. **Salesmanship.** II. 3 Hrs. Laws of salesmanship. Training programs. The problems of the sales manager. Omitted 1941-42. Mr. Wherry

128. **Advertising.** II. 3 Hrs. Technique and procedure of local and national advertising, by the case method, stressing problems faced and decisions made by the modern publicity executive. PR: Econ. 1. Staff

133. **Insurance.** I. 3 Hrs. General principles which underlie all forms of insurance. Omitted 1941-42. Mr. Wherry

141, 142. **Business Law.** I, II. 3 Hrs. per semester. Fundamentals of the law of contracts, agency, negotiable instruments, partnerships, corporations, and sales, as applied to business situations. Not open to students preparing for law degree. Mr. Cooley

155. **Modern Banking.** II. 3 Hrs. Banking policies and practices of concern both to those who operate banks and to those who use their services. PR: Econ. 111. Offered in 1941-42 and alternate years. Mr. Keller

204. **Cost Accounting.** II. 3 Hrs. Application of labor, material, and burden costs to the product unit under job order or process costing. Use of standards and other methods of control. PR: Business 101. Mr. Cooley

206. **Income Tax Accounting.** II. 3 Hrs. Preparation of income tax returns from accounts of individuals, partnerships, and corporations. Application of accounting principles and procedure involved in Federal taxes on profits and income. PR: Business 101. Mr. Cooley

281. **Business Management.** II. 3 Hrs. Principles of organization, system, control, standards, research, public relations, and executive decisions as

applied to the modern business unit by case method. PR: Business 5, 6, 121, 141; Econ. 113, 114, 131, or consent of instructor. Mr. Cooley

Graduate Division

307, 308. Auditing. I, II. 3 Hrs. per semester. Duties and responsibilities of auditor; methods of verification of balance sheet and profit and loss accounts; working papers and schedules, audit reports and certificates. PR: Bus. 101, 102, 204, 206. Mr. Cooley

English Language and Literature

Professors JOHNSON, DRAPER and SMITH; Associate Professors CHAPPELL and CROCKER; Assistant Professors BRAWNER, BISHOP, and WENTWORTH; Instructors REED, SAYRE, PETTIGREW, and PAGE

To be received as a major student in the department of English the student must have credit for the following lower-division courses, or their equivalent: English 3; English 4 or 5; English 13 or some other course in advanced composition; — in all, eight hours in addition to the general college requirement of six hours in English composition (English 1 and 2).

A major student will usually be expected to complete at least 24 hours of upper-division courses in English. One course each in Shakespeare, Chaucer, History of the English Language, and Bible literature or world literature are normally included in this 24-hour requirement.

A major student will also be required to complete at least 18 hours in some one of the following languages: French, Latin, German. At least 12 hours in a second foreign language are recommended but are not absolutely required. Spanish will not be accepted as a single required language for English majors.

Six hours of English history, History 133 and 134 or their equivalent, and 9 to 12 hours of public speaking are also usually required of major students.

Candidates for the degree of Master of Arts who have not taken English 230, 231, 234, and 235 or their equivalent as undergraduates must include these courses in their graduate program. Courses 224 and 391 are also usually required of all English graduate majors.

Candidates for the degree of Master of Arts with major in English must have met the undergraduate requirement of 18 hours of college work in French, German, or Latin.

HONORS IN ENGLISH

Students enrolled in the department of English, whether major students or not, who maintain an honor-point average of at least 2.0 during their junior and senior years and who complete at least 24 hours of upper-division work in English may qualify as honor students in English and receive a special departmental honor certificate upon graduation. For full information concerning the requirements for honors in English, students should consult the head of the department.

CERTIFICATION WITH ENGLISH AS A TEACHING FIELD

A major in English may meet the requirements for the A. B. degree and also the requirements of the State Board of Education for teachers' certification, with English and French or with English and Latin as teaching fields, in four years or eight semesters, provided two years of high-school Latin or French

have been offered for entrance credit. In lieu of two entrance credits, additional hours of college work in the language are required for certification. Other combinations, such as English and social studies or English and physical education, will frequently require somewhat more than four years, and students who desire these combinations should consult the departmental adviser in planning their courses.

COURSES OF INSTRUCTION

Lower Division

1C. **English Composition.** I, II. 3 Hrs. Required of all students who are inadequately prepared for English 1. Staff

1. **Composition and Rhetoric.** I, II. 3 Hrs. Primarily for freshmen. Required of all candidates for the bachelor's degree in all the colleges. Not to be taken for credit by upper-classmen except with the previous permission of the head of the English department. Staff

2. **Composition and Rhetoric.** I, II. 3 Hrs. Continuation of English 1. Primarily for freshmen. Required of all candidates for the bachelor's degree in all the colleges. Not to be taken for credit by upper-classmen except with the previous permission of the head of the English department. Staff

3. **English Literature.** I, II. 3 Hrs. Open only to lower-classmen. A survey course devoted to a study of English authors from **Beowulf** to Burns and of readings from their works. PR: English 1 and 2 or a superior record in high-school English and in the freshman English placement test. Staff

4. **English Literature.** I, II. 3 Hrs. Open only to lower-classmen. A Continuation of English 3, including English authors and their works from Wordsworth to the present time. PR: English 1 and 2 or a superior record in high-school English and in the freshman English placement test. Staff

5. **American Literature.** I, II. 3 Hrs. Open only to lower-classmen. Survey course devoted to study of American authors with readings from their works. PR: English 1 and 2 or a superior record in high-school English and in the freshman English Placement test. Staff

13. **Expository Writing.** I, II. 2 Hrs. Not open to upper-classmen. PR: English 1 and 2. Staff

14. **Advanced Composition.** II. 2 Hrs. For pre-law students only. PR: English 1 and 2. Staff

16. **Descriptive and Narrative Writing.** I. 2 Hrs. PR: Either English 13 or a mark of at least B in English 2. Mrs. Reed

Upper Division

Credit for at least nine hours of lower-division English is prerequisite to admission to any of the upper-division courses. Credit for English 3, and for English 4 or 5 or their equivalent, and for at least three hours of upper-division English, is prerequisite to admission to courses 230 to 393, inclusive, except where otherwise indicated in the course announcement.

115. **Advanced Composition: Creative Writing.** II. 2 Hrs. PR: consent of instructor. Mrs. Reed

125. **Advanced Composition: Logical Forms of Writing.** I. 2 or 3 Hrs. Not open to lower-classmen. Staff

126. **Advanced Composition: Technical Writing.** II. 2 or 3 Hrs. Not open to lower-classmen. Staff

142. **Shakespeare.** I, II. PR: English 3 or 4. Mr. Smith or Mr. Crocker

160. **Contemporary Literature.** I, II. 3 Hrs. Mr. Smith or Mr. Bishop

163. **History of English Literature.** I. 3 Hrs. Not open to lower-classmen or to those who already have credit for English 3. Causes, character, and effects of the various artistic, social, and political forces affecting the course of English literature down to the middle of the 18th century. Lectures, assigned readings, and reports. Staff

164. **History of English Literature.** II. 3 Hrs. Not open to lower-classmen or to those who already have credit for English 4. Continuation of English 163 covering the time from the middle of the 18th century to the present. Staff

165. **History of American Literature.** II. 3 Hrs. Not open to lower-classmen or to those who already have credit for English 5. A course in American literature similar in character to English 163 and 164. Staff

NOTE: Where the various University curricula include general courses in English or American literature, either courses 3, 4, and 5, or 163, 164, and 165 will satisfy the requirement. The same is true as regards teachers' certification requirements.

166. **American Fiction.** II. 3 Hrs. Mr. Brawner

172. **Folk Literature in West Virginia.** I. 2 Hrs. Introductory course in folk games, songs, ballads, and stories of the state. Mr. Chappell

173. **Poetry.** II. 2 Hrs. Mr. Brawner

175. **The Short Story.** I. 2 Hrs. Mr. Bishop

181. **Bible Literature.** I. 3 Hrs. Mr. Johnson

185. **Masterpieces of World Literature.** II. 3 Hrs. Offered in 1941-42 and alternate years. Mr. Crocker

221. **Advanced Rhetoric.** II. 2 Hrs. Mr. Johnson

224. **Literary Criticism.** I. 3 Hrs. Mr. Johnson

228. **Advanced Grammar.** II. 2 Hrs. Mr. Johnson or Mr. Bishop

229. **The English Language, since 1800.** II. 3 Hrs. Mr. Wentworth

230. **The English Language.** I. 3 Hrs. Mr. Chappell

231. **Old English.** I. 3 Hrs. Mr. Chappell

232. **Beowulf.** II. 3 Hrs. Mr. Chappell

233. **English Literature, 700-1200.** I. 3 Hrs. Mr. Chappell

234. **Chaucer.** II. 3 Hrs. Mr. Smith or Mr. Chappell

235. **Shakespeare.** I, II. 3 Hrs. Mr. Draper

236. **Dramatic Art of Shakespeare.** II. 3 Hrs. Not Offered in 1941-42. Mr. Bishop

237. **English Literature, 1200-1550.** II. 3 Hrs. Mr. Chappell

239. **Pre-Shakespearean Drama.** I. 3 Hrs. Offered in 1941-42 and alternate years. Mr. Crocker

240. **Elizabethan Drama.** II. 3 Hrs. Offered in 1941-42 and alternate years. Mr. Crocker

241. **Literature of the Sixteenth Century.** I. 3 Hrs. Offered in 1942-43 and alternate years Mr. Draper

243. **Restoration and Eighteenth Century Drama.** I. 3 Hrs. Offered in 1942-43 and alternate years. Mr. Crocker

245. **Literature of the Seventeenth Century.** II. 3 Hrs. Offered in 1942-43 and alternate years. Mr. Draper

247. **Literature of the Eighteenth Century.** I. 3 Hrs. Offered in 1941-42 and alternate years. Mr. Draper

248. **Literature of the Eighteenth Century.** II. 3 Hrs. Offered in 1941-42 and alternate years. Mr. Draper

249. **The Romantic Movement.** I. 3 Hrs. PR: English 4 or English 164. Mr. Brawner

251. **Victorian Literature.** II. 3 Hrs. PR: English 4 or English 164. Mr. Smith

259. **Modern English Literature, 1881-1918.** I. 3 Hrs. PR: English 4 or English 164. Mr. Crocker

261. **Aspects of the Drama.** I. 2 Hrs. Mr. Crocker

262. **Modern Drama.** II. 3 Hrs. Mr. Crocker

263. **Study of One Author.** I or II. 2 Hrs. The entire production or the most important work of some selected author of the nineteenth or twentieth century is studied to gain a complete view. Mr. Smith or Mr. Wentworth

264. **Study of One Author.** I. 2 Hrs. The work of one author of the sixteenth, seventeenth, or eighteenth century is studied. Mr. Draper

267. **American Drama.** I. 2 Hrs. Mr. Smith

268. **American Romanticism.** II. 3 Hrs. PR: English 5 or equivalent. Mr. Brawner

269. **American Literature, 1825-1850.** II. 2 Hrs. Offered in 1941-42 and alternate years. Mr. Wentworth

270. **American Poetry.** II. 3 Hrs. Offered in 1942-43 and alternate years. Mr. Smith

274. **The English Lyric.** II. 2 Hrs. Mr. Draper

276. **The English Novel.** I. 3 Hrs. Mr. Johnson

277. **The Essay.** II. 3 Hrs. Mr. Johnson

279. **Satire and Humor.** II. 3 Hrs. Offered in 1941-42 and alternate years. Mr. Johnson

Graduate Division

391. **Introduction to Literary Research.** I, II. 2 or 3 Hrs. Mr. Draper and Mr. Chappell

392. **Seminar.** I. 2 or 3 Hrs. The subject will vary according to the needs of the group taking the seminar. PR: Adequate training in English literature and the special field. Offered in 1941-42 and alternate years. Mr. Draper and Mr. Chappell

393. **Seminar.** II. 2 or 3 Hrs. Alternative with English 392. Mr. Draper and Mr. Chappell

Geology, Mineralogy, and Geography

Professor PRICE; Associate Professors MARTENS and FRIDLEY; Assistant Professor WELLS; Instructor STOCKING

Each student majoring in geology is required to present credit for Geology 266s or its equivalent. The following schedule is recommended.

NOTE: Credit hours are shown in parentheses after course designations.

FIRST YEAR, FIRST SEMESTER: French or German (3); English 1 (3); Mathematics 3 (4); Chemistry 3 (4); Military Science 1 (1); Physical Education 1 (1). Total, 16 hrs.

FIRST YEAR, SECOND SEMESTER: French or German (3); English 2

(3); Mathematics 4 (2); Chemistry 4 (4); Mechanical Engineering 20 (3); Military Science 2 (1); Physical Education 2 (1). Total, 17 hours

SECOND YEAR, FIRST SEMESTER: French or German (3); Geology 1 (4); Physics 1 (3); Physics 3 (1); history or economics; English or public speaking (3); Civil Engineering 1 (2); Military Science 3 (2). Total, 18 hrs.

SECOND YEAR, SECOND SEMESTER: French or German (3); Geology 3 (4); Physics 2 (3); Physics 4 (1); history or economics; English or public speaking (3); Military Science 4 (2). Total, 16 hrs.

THIRD YEAR: Geology 161 (3); Geology 204 (4); Geology 205 (4); Chemistry 105 (4) and Chemistry 106 (5); electives (12 to 14). Total, 32 to 34 hrs..

FOURTH YEAR: Upper-division courses in geology (12 to 15 hours); electives (17 to 19 hours). Total, 32 to 34 hrs.

SEQUENCES

Lower Division

Geology 1 and 3 give a general view of the subject.

Geology 15 and 111 introduce rocks and minerals and their uses.

Geography 7 and 109 or 116 and Geology 108 is a combination for students of education.

Geology 15 and 111 is a sequence suggested for majors in economics. If time permits, Geology 3 should be included in this group.

Geology 1, 3, and Geography 108 are a good general sequence.

COURSES OF INSTRUCTION

GEOLOGY AND MINERALOGY

Lower Division

1. **General Geology.** I, II. 3 or 4 Hrs. A scientific description of the composition and structure of the earth; the physical processes which change the surface of the earth; and an outline of knowledge of the internal forces at work in earthquakes, volcanoes, and the building of mountains. Staff

3. **Historical Geology.** I, II. 3 or 4 Hrs. PR: Geology 1. Evolution of the earth and its inhabitants. Mr. Wells

15. **Minerals and Rocks.** I. 4 Hrs. Designed primarily to teach the student to recognize the common minerals and rocks and to understand something of their origin and practical significance. Mr. Martens

Upper Division

108. **Natural Resources and Geology of West Virginia.** II. 3 Hrs. A summary of the geology of the State from a historical and economic standpoint. PR: Geol. 1 or 7. Mr. Price

111. **Economic Geology: Non-metallics.** I. 3 Hrs. Occurrence, formation. and use of non-metallic mineral substances, including mineral fuels, building materials, chemicals, etc. PR: Geol. 1 or 2. Mr. Price

112. **Economic Geology: Ore Deposits.** II. 3 Hrs. Mineral composition, geological features, and distribution of the deposits of the principal useful metals. PR: Geol. 1 or 2. Mr. Martens

161. **Field Geology.** II. 3 Hrs. An introduction to actual field techniques utilized by the geologist in mapping and reporting on the geology of unknown regions. The Morgantown area is studied in detail. PR: Geol. 3 or equivalent. Mr. Stocking

204. **Invertebrate Paleontology.** I. 4 Hrs. Invertebrate fossils; their biologic classification, evolutionary development and use in the correlation of strata. PR: Geol. 3. Mr. Wells

205. **Structural Geology.** I. 3 or 4 Hrs. Shape and position of rock masses in the earth's crust; mechanical principles underlying the various types of rock deformation; indication of the economic importance of deformed rock structures with respect to recovery of mineral products. PR: Geol. 1 and 3. Mr. Stocking

206. **Sedimentation.** II. 4 Hrs. Origin of the sedimentary rocks; the principles involved in interpretation of ancient geography, climates, animals and plants, i. e., the basic foundations for stratigraphy. Emphasis upon economically important sedimentary products. PR: Geol. 1 and 3. Mr. Stocking

207. **Stratigraphy.** II. 4 Hrs. Distribution, age, and general character of the geologic formations of North America, and their included forms of life. Changing structural features of the continent are noted by use of paleogeographic maps. PR: Geol. 3 and 204. Mr. Wells

208. **Geomorphology.** I. 3 Hrs. Forms and physiographic history of the surface features of the eastern United States. PR: Geol. 3. Mr. Fridley

209. **Geomorphology.** II. 3 Hrs. Continuation of Geology 208. Surface features of the western United States. PR: Geol. 3. Mr. Fridley

211. **Geology of Coal, Oil, and Gas.** II. 3 or 4 Hrs. Origin, geologic distribution, methods of exploration and exploitation, uses. and future reserves of coal, oil, and gas in the world, with special attention to the United States. PR: Geol. 3 and Chem. 106. Mr. Stocking

266S. **Field Geology.** SI. 6 Hrs. Practical experience in detailed geological field procedures and mapping in the vicinity of Seneca Rocks, Pendleton County. Students will reside at the West Virginia University Geology Camp, Mouth of Seneca. Living expenses are in addition to tuition and must be paid in the amount of $70 on or before registering. PR: Geol. 3 and 161 (or their equivalents). Mr. Woodward and Staff

273S. **Geological Survey.** SI, SII. 2 and 6 Hrs. Field experience as assistant to an older member of the State Geological Survey staff. Under direction of State Geologist Price. Mr. Price

284. **Mineralogy.** I. 4 Hrs. The first one-third of the course deals with general principles of mineralogy and crystallography and the last two-thirds is a systematic description of the more important minerals. PR: One year each of chemistry and physics. Mr. Martens

285. **Microscopic Mineralogy.** II. 4 Hrs. Principles of optical mineralogy and practice in the use of the polarizing microscope in identification of minerals. Applications to various branches of geology and related sciences are stressed in accordance with the interest of the individual student. PR: Geol. 284. Mr. Martens

289. **Geologic Problems.** I, II. 2 to 4 Hrs. Specialized work for advanced students based upon original field and laboratory work or upon outstanding contributions to the literature. Consult departmental adviser before registering. Staff

290. **Geologic Problems.** I, II. 2 to 4 Hrs. Continuation of Geol. 289. Staff

291, 292. **Seminar.** I, II. 1 Hr. PR: Geol. 204. Mr. Martens and Mr. Stocking

Graduate Division

301. **Micropaleontology.** I. 4 Hrs. Identification of Foraminifera, Bryozoa, and Ostracoda with aid of the microscope. Emphasis upon classification, nomenclature, and use of paleontological literature. PR: Geol. 204. Mr. Wells

310. Advanced Economic Geology. I. 3 Hrs. Occurrence, origin, and distribution of mineral products of economic value and the practical application of geologic principles. PR: Geol. 111 and 205. Mr. Price

395, 396. Special Topics. I and II. 1 to 4 Hrs. per semester. Petrography of igneous rocks, sedimentary petrography, invertebrate paleontology, stratigraphy, economic geology, and geomorphology are suggested topics. Staff

397, 398. Research. I, II. 1 to 5 Hrs. Specialized work for advanced students based upon field or laboratory evidence and reported upon in candidacy for advanced degrees. Staff

GEOGRAPHY

Lower Division

7. Introductory Geography. I. 3 or 4 Hrs. A study of the relationship between environment and forms of life, with special emphasis on physiography and climatology. Mr. Fridley

Upper Division

109. Economic Geography. II. 2 Hrs. Presentation of the regional method of treating agricultural, industrial, and commercial development of each of the various countries of the world, and study of the environment features which have contributed to the development. PR: Geol. 1 or 7. Mr. Fridley

116. Geography of North America. II. 3 Hrs. A study of the geographic sections of the United States and Canada and a brief survey of each of the Central American republics. PR: Geol. 1 or 7. Mr. Fridley

Germanic Languages and Literatures

Assistant Professor ROESCH and Instructor LEMKE

The chief objective of the department is to enable the student to read thoughtful German without the aid of a dictionary. Of German 1, 2, 3, and 4, each is prerequisite to the next following, and the four combined are prerequisite to all other courses.

Students majoring in German are advised to base their schedules on upper livision courses from the following subjects, which are listed here in the order of their importance: German, education, English, Europeon history, Latin, Romance languages, modern philosophy, and Greek. Those who are not planning to teach German may omit the courses in education, but the sequence of subjects, from the angle of their desirability for a major in German, remains the same.

COURSES OF INSTRUCTION[1]

Lower Division

1. Elementary German. I, II. 3 Hrs. Pronunciation, syntax, reading, composition. Staff

2. Elementary German. I, II. 3 Hrs. Staff

3. Intermediate German. I. 3 Hrs. Rapid reading of prose by modern authors, memorizing of poems, dictation, composition. Staff

4. Intermediate German. II. 3 Hrs. Continuation of German 3. Staff

[1]German 1, 2, 3, and 4 each is prerequisite to the next following, and the four combined are prerequisite to all other courses with the exception of German 111, 112, 121, and 122, for which German 1 and 2 are prerequisite.

Upper Division

105. **The German "Novelle".** I. 3 Hrs. Mr. Lemke

107. **Nineteenth Century Drama.** I. 3 Hrs. Critical study of selected dramas by Kleist, Grillparzer, Hebbel, Ludwig. Miss Roesch

108. **Nineteenth-Century Drama.** II. 3 Hrs. Continuation of German 107. Miss Roesch

†111. **Spoken German.** I. 3 Hrs. Practice in the speaking and writing of German. Miss Roesch

†112. **Spoken German.** II. 3 Hrs. PR: one year of college German or two years of high-school German. Miss Roesch

121. **Scientific German.** I. 3 Hrs. Primarily for students in science courses. Mr. Lemke

122. **Scientific German.** II. 3 Hrs. Continuation of German 121. Mr. Lemke

†131. **German Composition.** II. 1 Hr. Practice in the writing of German

†132. **German Composition.** II. 1 Hr. Practice in the writing of German

136. **Introduction to Goethe.** II. 2 Hrs. Miss Roesch

161. **Lyric Poetry (1750-1800).** I. 3 Hrs. Mr. Lemke

162. **Lyric Poetry (1800-1900).** II. 3 Hrs. Mr. Lemke

172. **The Romantic Movement.** II. 3 Hrs. Mr. Lemke

†211. **Middle High German.** I. 1 Hr. PR: 12 hours of German from the upper division. Miss Roesch

†212. **Middle High German.** II. 1 Hr. PR: same as for German 211, and including it. Miss Roesch

†241. **Faust, Part I.** I. 3 Hrs. Open to qualified undergraduates. Miss Roesch

†242. **Faust, Part II.** II. 3 Hrs. PR: German 241. Miss Roesch

245. **History of German Literature, 1766-1870.** I. 3 Hrs.

246. **History of German Literature, 1870-1914.** II. 3 Hrs. Continuation of German 245.

†Omitted, 1942-43.

History

Professors AMBLER, CHITWOOD, and SHORTRIDGE; Associate Professors ENNIS and SUMMERS; Instructor EASTON

Before graduation history majors are required to complete 18 hours in upper division courses, including History 276, introduction to historical research and bibliography. Six hours in political science and 6 hours in economics are also required in addition to the special requirements for the A. B. degree. Students who expect to major in history should complete the following subjects, or their equivalents, in their first and second years: English, 6 hours; French or German, 12 hours; history, 12 hours, which should include History 52 and 53, and may include one year's work in either Humanities or Social Sciences general courses; zoology, botany, geology, or biology, 8 hours: political science, 6 hours; and economics, 6 hours. In planning work in history, students should consult the department in order that advanced courses may be properly correlated as well as suited to individual needs and tastes. One lower-division "year course" or equivalent in history is prerequisite for a major, but prospective majors are advised to take two such courses or History 52 and History 53 and one year of Humanities or Social Sciences general

courses. Students who major in history must obtain the advice of the department of history.

COURSES OF INSTRUCTION

Lower Division[1]

1. Europe to 1815. I, II. 3 Hrs. For freshmen. Mr. Ennis and Mr. Easton
2. Europe since 1815. II. 3 Hrs. Continuation of History 1. Mr. Ennis and Mr. Easton
52. United States to 1865. I, II. 3 Hrs. For sophomores. Mr. Chitwood, Mr. Ambler, and Mr. Summers
53. United States since 1865. II. 3 Hrs. Continuation of History 52. Mr. Chitwood, Mr. Ambler, and Mr. Summers

Upper Division

101. Ancient Times. I. 3 Hrs. Mr. Easton
106. Medieval Europe. I. 3 Hrs. PR: one college course in European history. Mr. Easton
107. The French Revolution. I. 3 Hrs. Mr. Easton
108. The Napoleonic Era. II. 3 Hrs. PR: History 107. Mr. Ennis
114. The Renaissance and the Reformation. II. 3 Hrs. Mr. Easton
133. British Civilization to 1603. I. 3 Hrs. Mr. Shortridge
134. British Civilization since 1603. II. 3 Hrs. Continuation of History 133. Mr. Shortridge
135. English Constitutional Growth. I. 3 Hrs. Primarily for pre-law juniors. Mr. Shortridge
150. West Virginia. I, II, 3 Hrs. Mr. Ambler
151. American Colonial History. I, II. 3 Hrs. Mr. Chitwood
161. Latin America. I or II. 3 Hrs.
164. Problems of the Pacific. II. 3 Hrs. Mr. Ennis
218. Causes of the World War. II. 3 Hrs. Mr. Chitwood
231. The British Empire. I. 3 Hrs. Mr. Shortridge
232. Canada. II. 3 Hrs. Mr. Shortridge
233. Stuart England. I. 3 Hrs. Mr. Shortridge
234. Recent Britain. II. 3 Hrs. Mr. Shortridge
241. Modern Europe, 1876-1914. II. 3 Hrs. Mr. Ennis
242. Contemporary Europe. I or II. 3 Hrs. Mr. Ennis
249. The Westward Movement to 1820. I or II. 3 Hrs. Mr. Ambler
254. The Trans-Mississippi West. I, II. 3 Hrs. Mr. Ambler
256. The Jacksonian Era. II. 3 Hrs. Mr. Chitwood
257. The Ante-bellum South and the War of Secession. I, II. 3 Hrs. Mr. Summers
258. Reconstruction and National Development, 1865-1898. I, II. 3 Hrs. Mr. Ambler

[1]All first and second-year courses are offered as lower-division "year courses." These courses run through the year, but in no case is the first half-year a prerequisite for the second half. For example, History 1 is not a prerequisite for History 2. History 1 and History 2 make up the introductory first years in history. History 52 and 53 are primarily for sophomores. A freshman should not take more than one "year course" at a time, and a sophomore may take two "year courses" only by permission of the adviser.

259. Recent American History. II. 3 Hrs. Mr. Ambler

260. American Foreign Policy and Diplomacy, 1776-1861. I. 3 Hrs. PR: History 52 or equivalent.

261. American Foreign Policy and Diplomacy, 1861-1934. II. 3 Hrs. PR: History 53 or equivalent.

263. Anglo-American Diplomatic Relations. I. 3 Hrs.

264. American Policy in Latin-American Relations. II. 3 Hrs.

265. American Constitutional Development to 1860. I. 3 Hrs. PR: History 52 and 53, or equivalent. Mr. Chitwood

266. American Constitutional Development Since 1860. II. 3 Hrs. Continuation of History 265. Mr. Summers

270. Research in American History. I, II. 2 Hrs. Staff

271. Problems in Recent European History. II. 3 Hrs. Mr. Ennis

276. Introduction to Historical Research and Bibliography. I, II. 3 Hrs. This course is prescribed in the fourth year for all history majors. Mr. Summers

†289. Problems in Revolutionary Europe, 1763-1815. I or II. 3 Hrs. Mr. Easton

Seminars[1]

301. Thesis. I. 2 or 3 Hrs. Staff

302. Thesis. II. 2 or 3 Hrs. Staff

303. Research I. 6 Hrs. Staff

304. Research. II. 6 Hrs. Staff

349. Problems in Local and Regional History. I. 3 Hrs. Mr. Ambler

350. Problems in Local and Regional History. II. 3 Hrs. Mr. Ambler

351. American Colonial Institutions. I, II. 3 Hrs. Mr. Chitwood

384. Problems in British Imperial History. I. 3 Hrs. Mr. Shortridge

385. Problems in British Imperial History. II 3 Hrs. Mr. Shortridge

Home Economics

Courses in this subject are offered in the College of Arts and Sciences and in the College of Agriculture, Forestry, and Home Economics.

Students in the College of Arts and Sciences who select home economics as a major must complete the lower-division requirements with the following changes (see page 110):

(b) Science. Chemistry, 8 hours, and Biology, 8 hours.

(e) Additional. At least 6 hours in each of three of the following: English, including public speaking; history; and home economics.

(f) Electives include Home Economics 3, 4, 17, and 31, economics, sociology, psychology, political science, and Humanities 1.

In the upper division, Home Economics 107, 115, 120, 135, 240, 251, 254, or 252 should be taken. The total hours must not exceed 36 in this College. Further electives should be taken in biological sciences and social sciences.

Attention is called to the fact that students who are not interested in the physical and biological sciences may elect Home Economics 17, 31, 115, 134 or 135, 138, 160, 161, and 240.

[1]Seminar courses are for history and social science majors and admission is only by permission of instructors in charge and should be by their request.

Students who are preparing to teach home economics must meet the requirements of the State Board of Education and of the College of Education.

The head of the Division of Home Economics in the College of Agriculture is also a member of the College of Education and is the adviser for students wishing to meet the requirements for a high-school certificate to teach home economics with a second teaching subject.

Library Science

Professor Kellam and Assistant Reese

The courses in library training are designed primarily to meet the needs of persons preparing to qualify for State certification as part-time librarians in public schools. However, certain courses will be of particular value to general students in helping them to find library materials for all of their class work. Practice work in the University High School Library will be required of all students majoring in Library Science. A good knowledge of typing is desirable for high-school librarians and should be obtained if possible. See also Ed. 291 in the Announcements of the College of Education.

COURSES OF INSTRUCTION

Lower Division

1. **Teaching the Use of the Library.** I, II. 2 Hrs. Planned to give a working knowledge of the University Library as well as school libraries. Basic reference materials will be considered, together with simple bibliography making. This is a general course and would be useful to any student in in the University. Prerequisite for all library science courses.

101. **Reference and Bibliography.** I. 3 Hrs. Basic reference books, dictionaries, encyclopedias, indexes, year books, and other reference material will be studied and evaluated, with practice in detailed bibliography making.

102. **Cataloguing and Classification.** II. 3 Hrs. Fundamental principles of cataloguing and classification, with practical experience in handing all the types of books. Problems of teacher-librarians will receive special attention.

103. **Children's Literature and Story Telling.** I. 3 Hrs. Theory of book selection and history of children's literature.

104. **Book Selection.** II. 2 Hrs. Principles and methods of book selection for junior and senior high-school libraries and the necessary bibliographic tools.

105. **Book Selection.** 2 Hrs. Continuation of course 104. This course is given as Education 291.

106. **History of Books and Libraries.** II. 3 Hrs. Survey course, including the history of writing, the history of writing materials, the development of the book from early manuscript form, history of printing, printers, illustrators, and bindings.

107. **Administration of School Libraries.** I. 3 Hrs. Methods of planning. equipping, and organizing a library, together with technical and mechanical processes involved.

108. **Library Practice.** I, II. 3 Hrs. A field course designed to give the student experience in meeting library conditions and problems as they exist and arise in actual practice in school libraries.

Mathematics

Professors REYNOLDS and TURNER; Associate Professors DAVIS and VEHSE; Assistant Professor STEWART; Instructors COLE and VEST

Students who enter from high school with only 1 unit of algebra and 1 unit of plane geometry must elect Mathematics 2 before being admitted to any further courses, except Mathematics 7.

Students who wish to fulfill requirements for mathematics as a teaching subject are advised to take Mathematics 3, 4, 5, 7, and 107, and 108, or in case the student enters with only 1 unit in algebra and 1 unit in plane geometry, Mathematics 2, 3, 4, 7, 5, and 107 and 108.

Preparation for the Major. Mathematics 7, 3, 4, 5. Students who have only 1 unit in algebra, Mathematics 2, 3, 7, 4 or 10, 5. If a student comes well prepared in mathematics, the upper-division courses, Mathematics 107 and 108, may be taken while he is still a student in the lower division.

The Major. Mathematics 107, 108, 240, 241, 242, and one of the following courses: 243, 244, 245, and 246.

COURSES SUGGESTED FOR MAJORS IN MATHEMATICS WITH A SECOND TEACHING SUBJECT

NOTE: Credit hours are shown in parentheses after course designations.

FIRST YEAR, FIRST SEMESTER: English 1 (3); French or German (3); history (3); Mathematics 3 (4) and 4 (2); military science (1); physical education (1). Total, 16 or 17 hrs.

FIRST YEAR, SECOND SEMESTER: English 2 (3); French or German (3); history (3); Mathematics 5 (4); public speaking (2); military science (1); physical education (1). Total, 16 to 17 hrs.

SECOND YEAR, FIRST SEMESTER: French or German (3); Mathematics 107 (4); science (4) economics (3); political science (3); military science (2); physical education (1). Total, 19 hrs.

SECOND YEAR, SECOND SEMESTER: French or German (3); Mathematics 108 (4); science (4); sociology (3); English (2); military science (2); physical education (1). Total, 18 hrs.

THIRD YEAR: Mathematics 240 (3) and 242 (3); education (8); health (2); second teaching subject and electives (13 to 19). Total, 29 to 35 hrs.

FOURTH YEAR: Mathematics 241 (3); 243, 244 or 245 (3); education (12) second teaching subject and electives (12 to 18). Total, 30 to 36 hrs.

COURSES OF INSTRUCTION

Lower Division

2. **Algebra.** I, II, 3 Hrs. PR: 1 unit of algebra and 1 unit of plane geometry. Staff
3. **College Algebra.** I, II. 4 Hrs. PR: 1½ units of algebra or Mathematics 2, and 1 unit of plane geometry. Staff
4. **Plane Trigonometry.** I, II. 2 Hrs. PR: 1½ units of algebra and 1 unit of plane geometry. Staff

5. **Analytic Geometry.** I, II. 4 Hrs. PR: college algebra and plane trigonometry. Staff

7. **Solid Geometry.** I, II. 3 Hrs. If offered to remove entrance conditions, ½ unit. PR: plane geometry. Staff

10. **Plane Trigonometry.** II. 3 Hrs. PR: one unit of algebra and one unit of plane geometry. Staff

Upper Division

106. **Descriptive Astronomy.** II. 3 Hrs. PR: Math. 5. Mr. Reynolds

107 or 207. **Differential and Integral Calculus.** I, II. 4 Hrs. PR: Mathematics 5. Staff

108 or 208. **Differential and Integral Calculus.** I, II. 4 Hrs. Continuation of Mathematics 107. Staff

128. **Mathematical Theory of Investment.** II. 3 Hrs. Primarily for students in economics and sociology. PR: Mathematics 3. Mr. Reynolds

130. **Elementary Theory of Mathematical Statistics.** II. 3 Hrs. PR: Mathematics 107. Mr. Reynolds

240. **Differential Equations.** I. 3 Hrs. PR: Mathematics 108. Mr. Davis

241. **Theory of Determinants and Analytic Geometry of Space.** I. 3 Hrs. PR: Mathematics 108. Miss Turner

242. **Advanced Calculus.** II. 3 Hrs. PR: Mathematics 108. Mr. Vehse

243. **Projective Geometry.** II. 3 Hrs. PR: Mathematics 241. Miss Turner

244. **Theory of Equations.** II. 3 Hrs. PR: Mathematics 108. Mr. Reynolds

245. **Vector Analysis.** II. 3 Hrs. PR: Math. 240 and 242. Mr. Stewart

246. **Quantitative Logic.** I. 3 Hrs. Pr: Mathematics 5. Mr. Reynolds

247. **Theory of Numbers.** II. 2 Hrs. PR: Mathematics 5. Mr. Vehse

248. **History of Mathematics.** II. 2 Hrs. PR: Mathematics 5 or 52s. Mr. Reynolds

249. **History of Elementary Modern Mathematics.** II. 2 Hrs. PR: Mathematics 5 or 52s. Mr. Reynolds

360. **Differential Geometry and Theory of Surface.** I. 3 Hrs. PR: Mathematics 240, 241, 242, and 243. Mr. Davis

361. **Differential Geometry and Theory of Surface.** II. 3 Hrs. Continuation of Mathematics 360. Mr. Davis

362. **Higher Algebra.** 1. 2 Hrs. PR: Mathematics 242 and 243. Mr. Reynolds

363. **Higher Algebra.** II. 2 Hrs. Continuation of Mathematics 362. Mr. Reynolds

364. **Introduction to the Theory of Functions of a Complex Variable.** I. 3 Hrs. PR: Mathematics 240, 242, and 243. Mr. Reynolds

365. **Introduction to the Theory of Functions of a Complex Variable.** II. 3 Hrs. Continuation of Mathematics 364. Mr. Reynolds

366, 367. **Higher Plane Curves.** I and II. 3 Hrs. per semster. PR: Mathematics 243. Miss Turner

370, 371. **Theoretical Mechanics.** I and II. 3 Hrs. per semester. PR: Mathematics 240 and Physics 232. Mr. Vehse

372, 373. **Line Complexes and Cremona Transformations.** I, II. 3 Hrs. per semester. PR: Mathematics 243. Mr. Davis

374, 375. **Algebraic Surfaces.** I and II. 3 Hrs. per semester. PR: Mathematics 367. Miss Turner

376, 377. **Theory of Functions of a Real Variable.** I and II. 3 Hrs. PR: Mathematics 365. Mr. Reynolds

Philosophy and Psychology

Professors WINTER and STALNAKER; Assistant Professors CRESSWELL and CURTIS

There is such wide diversity in the preparation, needs and aims of individual students that the department cannot lay down inflexible rules with regard to sequence of courses.

Psychology 1 (Introduction to Psychology) or Psychology 3 and 4 (General Psychology) is prerequisite to all other courses in the department. The upper-division courses are arranged in the order best suited to a progressive development of the fields of philosophy and psychology respectively.

Majors. Students who desire to do their major work in this department should consult with the head of the department before making their decision.

There are various fields of work open to those who major in either philosophy or psychology, some of which are as follows:

Psychology Majors:

1. Teaching psychology in university, college, or normal school.
2. Clinical work in public schools, hospitals, or social service.
3. Vocational guidance.
4. Personnel work in industry.
5. Preparation for certain phases of psychiatry.
6. Consulting psychologist.

Philosophy Majors:

1. Teaching philosophy in university, college, seminary, or normal school.
2. The ministry.
3. General culture for those not planning to undertake a specific type of work.

A major includes at least 24 hours of work in the Department. Students may major in either philosophy or psychology. Students majoring in either of these branches will include at least one course in the other.

The sequence of courses for each major will be arranged so as to give the student the best foundation for the type of work he wishes to pursue.

Related Courses. Various departments offer courses of special value to students of philosophy and psychology. Following is a list of these courses.

For students in psychology: zoology; physiology; neurology; sociology; education; political science; and economics.

For students in philosophy: classical civilization (Greek life and thought); ancient or medieval history, or both; sociology; at least 12 hours in one of the sciences, or mathematics.

Students whose work shows a marked deficiency in English will be required to take a course in advanced composition.

Majors who look forward to teaching philosophy or psychology should plan to secure at least a Master's degree before applying for a teaching position.

Students who expect to continue their study of philosophy or psychology in a graduate school, either here or elsewhere, are advised to take at least 12 hours of both German and French.

COURSES OF INSTRUCTION

PSYCHOLOGY

Lower Division

1. **Introduction to Psychology.** I, II. 3 Hrs. Not open to freshmen. This course is designed to familiarize the student with the principal phenomena of mental life, and is prerequisite to all other courses in psychology and philosophy except for those who take Psychology 3 and 4.
Mr. Winter and Miss Stalnaker

3. **General Psychology.** I. 4 Hrs. Open to freshmen. Three hours of lecture and quiz and two hours of laboratory per week
Mr. Curtis and Staff

4. **General Psychology.** II. 4 Hrs. PR: Psychology 3. Continuation of Psychology 3. Mr. Curtis and Staff

10 or 110. **Applied Psychology.** II. 3 Hrs. A study of the application of psychology to medicine and law. PR: Psychology 1 (or 3 and 4).
Mr. Winter

Upper Division

116. **Social Psychology.** I. 3 Hrs. PR: Psychology 1 (or 3 and 4).
Mr. Winter

122. **Child Psychology.** II. 3 Hrs. PR: Psychology 1 (or 3 and 4)
Miss Stalnaker

125. **Mental Hygiene.** I. 3 Hrs. PR: Psychology 1 (or 3 and 4).
Miss Stalnaker

132. **Psychology of Advertising and Industry.** II. 3 Hrs. PR: Psychology 1 (or 3 and 4) Mr. Curtis

219. **Clinical Psychology.** II. 3 Hrs. PR: Psychology 1 (or 3 and 4), 122, and 224. Miss Stalnaker

224. **Mental Measurement I.** 3 Hrs. PR: Psychology 1 (or 3 and 4),
Miss Stalnaker

226. **Advanced Experimental Psychology.** I. 2 Hrs. Students in this course will be given individual problems for experimentation. PR: Psychology 3, 4, and 224. Mr. Curtis

229. **Abnormal Psychology.** II. 3 Hrs. PR: Psychology 1 (or 3 and 4) and 116. Miss Stalnaker

230. **Advanced Psychology.** II. 3 Hrs. PR: Psychology 1 (or 3 and 4) and one course in philosophy. Mr. Winter

234. **Problems in Child Psychology.** II. 3 Hrs. Students in this course will be assigned individual problems in child behavior. PR: Psychology 1 (or 3 and 4), and 122. Miss Stalnaker

240. **History of Psychology.** II. 2 Hrs. PR: Psychology 1 (or 3 and 4) and two courses in philosophy. Mr. Winter

245. **Seminar.** I. 2 Hrs. A critical study of the current literature of psychology. PR: Psychology 1 (or 3 and 4), and 116. Mr. Winter

301, 302. **Sepcial Problems in Psychological Research.** I and II. 2 to 4 Hrs.
Staff

PHILOSOPHY

Lower Division

4. **Introduction to Philosophy.** I, II. 3 Hrs. PR: Psychology 1 (or 3 and 4).
Mr. Cresswell

11 or 111. **Ethics.** I. 3 Hrs. PR: Psychology 1 (or 3 and 4). Mr. Cresswell

Upper Division

104. **Introduction to Philosophy.** I, II. 3 Hrs. PR: Psychology 1 (or 3 and 4). Mr. Cresswell

106. **Logic** I. 3 Hrs. PR: Psychology 1 (or 3 and 4), Philosophy 4. Mr. Cresswell

107. **Aesthetics.** II. 3 Hrs. PR: Psychology 1 (or 3 and 4), Philosophy 4. Mr. Cresswell

112. **History of Ancient and Medieval Philosophy.** I. 3 Hrs. PR: Psychology 1 (or 3 and 4), Philosophy 4. Mr. Cresswell

113. **History of Modern Philosophy.** II. 3 Hrs. Continuation of Philosophy 112, ending with German Idealism. PR: Psychology 1 (or 3 and 4), and Philosophy 4. Mr. Cresswell

114. **Contemporary Philosophy.** II. 3 Hrs. PR: Psychology 1 (or 3 and 4), Philosophy 4, and 3 hours in other philosophy courses. Mr. Cresswell

120. **The Philosophy of Plato.** I. 3 Hrs. PR: Psychology 1 (or 3 and 4), Philosophy 4, and 3 hours in other courses, preferably Philosophy 112. Mr. Cresswell

208. **Philosophy of Religion.** II. 3 Hrs. PR: Psychology 1 (or 3 and 4), Philosophy 4, and 3 hours in other philosophy courses. Mr. Cresswell

212. **Seminar in Medieval Philosophy.** II. 3 Hrs. Medieval culture with particular reference to Thomas Aquinas. PR: Psychology 1 (or 3 and 4), Philosophy 4, 112, 113, and 106. Mr. Cresswell

217. **Seminar in Metaphysics.** I. 2 Hrs. Critical study of a selected system of thought. PR: Psychology 1 (or 3 and 4), Philosophy 4, 112, 113, and 106. Mr. Cresswell

Physics

Professors COLWELL and MOLBY; Associate Professor FORD; Assistant Professors HOLMES and THOMAS

The various courses offered in physics are designed to meet the needs of the students in the College of Arts and Sciences, Agriculture, and Engineering, the School of Music, and the School of Medicine. All the courses are divided into lower and upper divisions. Majors in physics or mathematics will choose courses from the upper group at the beginning of the third year.

COURSES SUGGESTED FOR PHYSICS MAJORS

First Year—English, algebra, trigonometry, introductory physics, French, some required subjects.

Second Year—analytical geometry, calculus, problems in physics, German, general physical laboratory or chemistry (or radio or photography), public speaking, some required subjects.

Third Year—light, electrical measurements, advanced radio, differential equations, German, some required subjects.

Fourth Year—modern electrical theory or electricity and magnetism, theoretical mechanics, vector analysis, intermediate physical laboratory.

Lower Division

1. **Introductory Physics.** I. 3 Hrs. Primarily for freshmen. Required of all agricultural students and all students in the School of Medicine. Must be accompanied by Physics 3. Takes up mechanics, sound, and heat. PR: plane geometry and algebra. Mr. Colwell and Mr. Thomas

2. **Introductory Physics.** II. 3 Hrs. Primarily for freshmen. Must be accompanied by Physics 4. Includes electricity, magnetism, and light. PR: Physics 1. Mr. Colwell and Mr. Thomas

3, 4. **Introductory Physical Laboratory.** I and II. I Hr. per semester. Primarily for freshmen. Accompanies and is required of all students who take Physics 1 and 2. Mr. Molby and Staff

17. **General Laboratory.** I, II. 2 Hrs. Primarily for sophomores and juniors. This course is designed to meet the needs of students who desire more laboratory work than that offered in Physics 3 and 4. PR: Physics 3 and 4. Mr. Molby

Upper Division

105. **General Physics.** I. 4 Hrs. Required of all candidates for engineering degrees and recommended for all students who major in mathematics. Not open to students who have credit for Physics 1. Physics 107 must accompany. Comprises mechanics, sound, and heat. PR: trigonometry and analytic geometry. Mr. Ford, Mr. Holmes, and Mr. Bailey

105A. **General Physics.** II 4 Hrs. A repeat course for those who have failed in Physics 105. Mr. Thomas

106. **General Physics.** II. 4 Hrs. Continuation of Physics 105. Not open to students who have credit in Physics 1 and 2. Covers light, electricity, and magnetism. Physics 108 must accompany. Mr. Ford and Mr. Holmes

107, 108. **General Physics Laboratory.** I and II. 1 Hr. per semester. A companion course for Physics 105 and 106. Mr. Molby and Staff

109, 110. **A Problem Course in General Physics.** I and II. 2 Hrs. per semester. Open to students who have taken Physics 1, 2, 3, and 4, or equivalent; not open to students who have taken Physics 105, 106, 107, and 108. Mr. Thomas

113. **Introductory Radio.** I. 3 Hrs. PR: Physics 1, 2, 3, and 4, or equivalent. Mr. Bailey

114. **Introductory Radio-Telegraphy and Radio-Telephony.** II. 3 Hrs. PR: Physics 113. Mr. Bailey

116. 216. **Photography.** II. 3 Hrs. For science majors. Mr. Molby

221. **Light.** I. 3 Hrs. Lectures and laboratory work, designed to meet the needs of students in general biology, chemistry, and medicine. Graduate credit will be allowed to those who are not majoring in Physics. PR: Physics 1, 2, 3, 4, and trigonometry, or Physics 105, 106, 107, and 108. Mr. Molby

223. **Radio-Telegraphy and Radio-Telephony.** I. 3 Hrs. Elective for seniors in electrical engineering. Open to juniors. PR: Physics 1, 2, 3, 4, or 105, 106, 107, and 108, and integral calculus. Mr. Bailey

224. **Radio-Telegraphy and Radio-Telephony.** II. 3 Hrs. Open to seniors. Elective for seniors in electrical engineering. PR: Physics 223. Mr. Bailey

225, 226. **Introduction to Modern Physics.** I and II. 3 Hrs. per semester. Especially for students majoring in the natural sciences. Open to all seniors. PR: Physics 1, 2, 3, and 4, or 105, 106, 107, and 108, and Mathematics 3 and 4, or equivalent. Mr. Ford

231, 232. **Theoretical Mechanics.** I and II. 3 Hrs. per semester. Open to seniors. PR: Physics 1, 2, 3, and 4, or 105, 106, 107, and 108, and integral calculus. Mr. Colwell

233. **Introductory Electricity and Magnetism.** I. 3 Hrs Open to seniors. PR: Physics 105, 106, 107, and 108. and integral calculus Mr. Holmes

234. **Introductory Electricity and Magnetism.** II. 3 Hrs. Continuation of Physics 233, which is prerequisite. Mr. Holmes

241, 243, 245, 247. **Physics Seminar.** I. 1 Hr. Open to seniors and graduates. Discussion of modern research in Physics. Mr. Colwell

242, 244, 246, 248. **Physics Seminar.** II. 1 Hr. Similar to Physics 241. Mr. Colwell

249, 250. **Intermediate Laboratory and Special Topics.** I and II. 2 to 4 Hrs. per semester. Open to seniors who major in physics. PR: Physics 105, 106, 107, and 108, and calculus. Mr. Colwell and Mr. Ford

Graduate Division

381. **Physical Optics.** I. 3 Hrs. Mr. Molby

382. **Physical Optics.** II. 3 Hrs. A continuation of Physics 381. Mr. Molby

383. **The Kinetic Theory of Gases and Molecular Physics.** I. 3 Hrs. PR: Physics 1, 2, 3, and 4, or Physics 105, 106, 107, and 108, and integral calculus. Mr. Holmes

384. **The Kinetic Theory of Gases and Molecular Physics.** II. 3 Hrs. A continuation of Physics 383. Mr. Holmes

385, 386. **Quantum Mechanics.** I and II. 3 Hrs. per semester. Mr. Thomas

387, 388. **The Differential Equations of Physics.** I and II. 3 Hrs. per semester. Mr. Thomas

391, 392. **Advanced Electricity and Magnetism.** I and II. 3 Hrs. per semester. Mr. Colwell

397, 398. **Research.** I and II. 4 to 6 Hrs. per semester. Mr. Colwell and Staff

Political Science

Professor FRASURE; Assistant Professors DELANCY and COHEN

Students who expect to select political science as their major subject should, while in the lower division, receive credit for Political Science 4 and 5, History 1, 2, 52, 53, and Economics 1 and 2 or Sociology 1. Humanities 1, 2, may be substituted for History 1, 2; and Social Science 1, 2, may be taken in place of Sociology 1. Political Science 4 and 5 constitute the basic work in this department, and they, or their equivalent, are prerequisite to all courses in the upper division. The major requirement is 18 hours of upper division courses. There should be a first minor of 12 hours in upper division courses in history or economics, and a second minor of 6 hours in upper division courses in the other subject. With the approval of the departmental adviser, part of the required work in the major may be taken in the College of Law.

COURSES SUGGESTED FOR POLITICAL SCIENCE MAJORS

NOTE: Credit hours are shown in parentheses after course designations.

FIRST YEAR, FIRST SEMESTER: English 1 (3); biology (4); French or German (3); History 1 (3) or Humanities 1 (4); military science (1); physical education (1). Total, 14 to 16 hrs.

FIRST YEAR, SECOND SEMESTER: English 2 (3); botany or zoology (4); French or German (3); History 2 (3) or Humanities 2 (4); military science (1); physical education (1). Total, 14 to 16 hrs.

SECOND YEAR, FIRST SEMESTER: Political Science 4 (3); French or German (3); History 52 (3); Economics 1 (3); Psychology 1 or Sociology 1 (3) or Social Science 1 (4); military science (2) or physical education (1); elective (2).

SECOND YEAR, SECOND SEMESTER: Political Science 5 (3); French

or German (3); History 53 (3); Economics 2 (3); Philosophy 4 (3) or Social Science 2 (4); military science (2) or physical education (1); elective (2).

COURSES OF INSTRUCTION[1]

Lower Division[2]

4. **The Principles and Practices of Government: The European States System.** I, II. 3 Hrs. Primarily for sophomores. Staff

5. **The Principles and Practices of Government: The American Federal System.** I, II. 3 Hrs. Primarily for sophomores. Staff

Upper Division

106. **American State and Local Government.** I, II. 3 Hrs. Miss DeLancy
107. **American City Government.** II. 3 Hrs. Miss DeLancy
202. **Political Parties and Public Opinion.** I. 3 Hrs. Mr. Cohen
208. **Problems of the Modern State: The Administrative Process.** I. 3 Hrs. Miss DeLancy
209. **Problems of the Modern State: The Legislative Process.** II. 3 Hrs. Miss DeLancy
210. **British Government and Practical Politics.** II. 3 Hrs. Mr. Frasure
213. **Modern Dictatorships.** II. 3 Hrs. Mr. Frasure
216. **Comparative Political Institutions.** I. 3 Hrs. Mr. Frasure
219. **History of Political Thought: Plato to Machiavelli.** I. 3 Hrs. Required of majors Mr. Cohen
220. **History of Political Thought: Machiavelli to the Present.** II. 3 Hrs. Required of majors. Mr. Cohen
221. **Recent and Contemporary Political Thought.** II. 3 Hrs. Mr. Cohen
222. **American Constitutional Principles.** II. 3 Hrs. Mr. Cohen
223. **International Law.** I. 3 Hrs. Mr. Cohen
260. **International Relations.** I. 3 Hrs. Mr. Frasure
261. **International Relations.** II. 3 Hrs. (Continuation of 260). Mr. Frasure

Graduate Division

301. **Methods of Research in Political Science.** I. 2 to 4 Hrs. Mr. Frasure
302. **Methods of Research in Political Science.** II. 2 to 4 Hrs. Mr. Frasure
303. **Selected Problems in International Relations.** I. 2 to 4 Hrs. Mr. Frasure
304. **Selected Problems in International Relations.** II. 2 to 4 Hrs. Mr. Frasure
307. **Selected Problems in State and Local Government.** I. 2-4 Hrs. Miss DeLancy
308. **Selected Problems in State and Local Government.** II. 2-4 Hrs. Miss DeLancy
360. **Thesis.** I. and II. 2 to 4 Hrs. Staff

Public Speaking

Assistant Professors LOWTHER and FEAR; Instructor MEEKS

The instruction in this department aims to serve the following ends, which are both cultural and practical: to prepare men and women to meet the ever increasing demand for effective speaking in social, business, and

[1]Regular elective for Arts and Sciences students.
[2]These courses are prerequisite to all upper-division work in the department.

professional life; to prepare qualified teachers in public speaking, debate, reading, and drama in secondary schools and colleges; to train men and women for public life as lecturers, readers, actors, salesmen, demonstrators, etc.; to enlarge the student's oral vocabulary, his ability to think quickly and logically in the presence of an audience; to develop his interpretive and dramatic powers; and to give general cultural training to all who seek greater enjoyment from reading good literature and attending the theatre.

Forensic Activities. An extensive program of intramural and intercollegiate debate and oratorical contests is fostered by the department in conjunction with Delta Sigma Rho, the honorary forensic fraternity.

Plays. The classes in play production give a number of public and semi-public plays each year.

Public Appearances. Numerous opportunities are afforded advanced students of speech to appear before clubs, schools, churches, and civic associations as speakers, readers, and story tellers. Advanced students and faculty members also present a series of Sunday afternoon recitals.

Majors. A minimum of 30 semester hours is required of majors, and 15 semester hours of speech minors. For those selecting speech as a second teaching field the following requirements totaling 24 hours are necessary:

	Course	*Hours*
3.	Beginning Voice and Diction	3
11.	Effective Speaking	3
113.	Beginning Debating	3
240.	Speech Correction	3
137.	Play Directing	3
	Electives	9

COURSES OF INSTRUCTION

Lower Division

3. Beginning Voice and Diction. I, II. 3 Hrs. Drills for developing proper breath support and for producing a strong, flexible, resonant voice. Coordination of mind and voice. Mrs. Fear

6. Beginning Acting. I, II. 3 Hrs. Drills for developing muscular control; for overcoming fear inhibitions; for rendering the body expressive of thought and emotion. Coordination of mind and body. Mr. Lowther

11. Effective Speaking. I, II. 3 Hrs. Study and application of the principles of practical public speaking. Practice in the composition and delivery of speeches intended to effect a definite audience response. Parliamentary law and procedure. Staff

13. Effective Speaking. I, II. 2 Hrs. For Engineering students only. Staff

29. Beginning Oral Interpretation. I, II. 3 Hrs. Mrs. Fear

Upper Division

ORATORY AND DEBATE

113. Beginning Debating. I, II. 3 Hrs. Mr. Meeks

117. Extemporaneous Speaking. I, II. PR: Course 11. Mr. Meeks

118. Public Discussion. I. II. PR: Course 11. Theory and practice of the various forms of group discussion such as the forum, the panel and the symposium. Mr. Meeks

120. **Advanced Debating.** I, II. 3 Hrs. Mr. Meeks

215. **Persuasion.** II. 3 Hrs. PR: Course 11 Mr. Lowther

VOICE AND ORAL INTERPRETATION

121. **Advanced Voice and Diction.** I, II. 3 Hrs. PR: Course 3. Mrs. Fear

129. **Technique of Oral Interpretation.** I, II. 3 Hrs. PR: Course 29. Mrs. Fear

222. **Oral Interpretation of Poetry.** I, II. 2 Hrs. PR: Course 129. Mrs. Fear

228. **Professional Reading.** I, II. 2 Hrs. For advanced majors only. Mrs. Fear

240. **Speech Correction.** I, II. 3 Hrs. Mr. Meeks

241. **Speech Pathology.** I, II. 3 Hrs. Mr. Meeks

DRAMATIC ARTS

100. **Theatrical Make-up.** I, II. 2 Hrs. Mr. Lowther

109, 110, 111, 112. **Verse Choir.** I, II. 1 Hr. Mrs. Fear

125. **Radio Dramatics, Theory, and Practice.** I, II. 3 Hrs. Mr. Lowther

132. **Advanced Acting.** II. 3 Hrs. PR: Course 6. Mr. Lowther

135. **Stage Craft.** I, II. 3 Hrs. Problems of plays from the standpoint of the technician. The problems of scenery design and construction, lighting, properties, and costumes studied through lectures, demonstrations, and laboratory. Mr. Herod

137. **Play Directing.** I. 3 Hrs. Mr. Lowther

139. **The Theatre and Theatric Arts.** II. 3 Hrs. Mr. Lowther

SPECIAL

140, 141, 142. **Extra-Curricular Speech Activities.** I, II. 1 to 3 Hrs. The head of the department may grant credit for any extra-curricular speech activity which is assigned and directed by a member of the speech faculty. Staff

SPEECH CLINIC. I, II. Students in speech courses found to possess speech defects will be required to attend the clinic for diagnosis and treatment. In so far as time will permit, the services of the clinic will be made available to any student of the University. Mr. Meeks

VOICE AND DICTION CLINIC. I, II. Students in speech courses needing special attention to problems of breathing and voice placing and diction will be assigned to this clinic. Mrs. Fear

143. **Theatre Workshop.** I, II. 1 to 3 Hrs. For the production of University plays and the informal stimulation of interest in creative arts. PR: course 135. Mr. Herod

Romance Languages and Literatures

Professors STATHERS, DARBY, and SPIKER; Associate Professor MITRANI; Assistant Professors ASHBURN and MANNING; Instructor MCBRIDE

Courses 1 and 2 or two years of high school credit will be required for entrance to courses 5, 6, 7, and 8. Usually students who have had two years' study of the language in high school should take courses 5 and 6. Students who have done three years of work in high school should take courses 7 and 8.

Prospective major students. and students who expect to do more advanced work in language, should not take more than 6 hours in courses 5, 6, 7 and 8.

Students whose grades have consistently fallen below B in language work in the lower division should not select Romance languages as a major subject.

No student who has not completed French 109, 110, 115, 116, and 231 or Spanish 109, 110, 211, 212, 221, and 222 will be recommended as a teacher of these subjects.

In order to be recommended by this Department for the degree of Bachelor of Arts a student must have completed, in addition to special requirements for the A. B. degree, one of the following combinations:

PROGRAM FOR MAJOR STUDENTS

NOTE: Credit hours are shown in parentheses after course designations.

FRENCH: French 109, 110, 115, 116, 221, and 222 (3 each); 231 (2,; Spanish (6 to 12).

SPANISH: Spanish 109, 110, 211, 212, 221, and 222 (3 each); French (9 to 12).

SUGGESTED DISTRIBUTION OF COURSES

FIRST YEAR: One Romance language, 6 hrs.; English 1 and 2 (6); a laboratory science, 8; physical education, 2; military science (when required), 2; electives, 8 to 10 hrs.

SECOND YEAR: Two Romance languages (6 hrs. each), 12 hrs.; military science (when required), 2; electives and lower-division preparation for minor subjects, 18 to 20 hrs.

THIRD YEAR: French or Spanish 109 and 110 (if not completed in second year) 6 hrs.; French 115 and 116 or Spanish 211 and 212, 6; minor subject and electives, 20 hrs.

FOURTH YEAR: French or Spanish 221 and 222, 6 hrs.; French 231 or elective in Spanish, 2; minor subject and electives, 24 hrs.

COURSES OF INSTRUCTION

FRENCH

Lower Division

1. Elementary French. I, II. 3 Hrs. Staff
2. Intermediate French. I, II. 3 Hrs. Staff
5. Contemporary Fiction. I, II. 3 Hrs. Staff
6. Contemporary Drama. II. 3 Hrs. Staff
7 or 107. Advanced Readings. I. 3 Hrs. Staff
8 or 108. Advanced Readings. II. 3 Hrs. Staff

Upper Division

109. Grammar and Pronunciation. I. 3 Hrs. For sophomores or juniors. PR: 12 hours of French, or equivalent. Staff
110. Advanced Conversation. II. 3 Hrs. For sophomores or juniors. PR: French 109 or equivalent. Staff
115. The Classical School. I. 3 Hrs. PR: 12 hours of French, or equivalent. Mr. Darby and Mr. Spiker
116. The Classical School After Moliere. II. 3 Hrs. PR: French 115. Mr. Darby and Mr. Spiker
217. Civilisation francaise. I. 2 Hrs. PR: French 115 and 116. Mr. Spiker
221. The Romantic Movement. I. 3 Hrs. PR: French 115 and 116. Mr. Stathers
222. French Literature Since 1850. II. 3 Hrs. PR: French 221. Mr. Stathers
223. The Problem Play. I. 2 Hrs. PR: French 115 and 116. Mr. Darby

224. **Historical Novel in the Nineteenth Century.** II. 2 Hrs. PR: French 115 and 116. Mr. Darby

†226. **Literary Criticism in the Nineteenth Century.** II. 2 Hrs. PR: French 221 and 222. Mr. Spiker

†229. **Literature of the Sixteenth Century.** I. 2 Hrs. PR: French 115 and 116. Mr. Spiker

†230. **The Sixteenth Century After 1550.** II. 2 Hrs. PR: French 115 and 116. Mr. Spiker

231. **Phonetics and Pronunciation.** II. 2 Hrs. PR: 18 hours of French, or equivalent. Mr. Stathers

237. **Moliere.** II. 2 Hrs. PR: French 115 and 116. Mr. Spiker

†243. **Etude du vocabulaire.** I. 2 Hrs. PR: French 109 and 110. Mr. Stathers

†244. **Explication de textes.** II. 2 Hrs. PR: French 109 and 110. Mr. Stathers

†275. **Theatre of Eighteenth Century.** I. 2 Hrs. PR: French 115 and 116. Mr. Darby

†276. **Voltaire.** II. 2 Hrs. PR: French 115 and 116. Mr. Darby

281. **Topic in Romantic Period.** I. 2 Hrs. PR: French 115 and 116. Mr. Stathers

282. **Topic in Contemporary Period.** II. 2 Hrs. PR: French 115 and 116. Mr. Stathers

Graduate Division

391. **Seminar.** I. 2 to 5 Hrs. The origin of French comedy relative to native and foreign elements in its composition. Mr. Spiker

392. **Seminar.** II. 2 to 5 Hrs. The development of the theory of tragedy before the seventeenth century. Mr. Spiker

395. **Seminar.** I. 2 to 5 Hrs. Individual study of some subject chosen from the literature of the first half of the nineteenth century. Mr. Stathers

396. **Seminar.** II. 2 to 5 Hrs. A critical study of some phase of literature of the second half of the nineteenth century. Mr. Stathers

SPANISH

Lower Division

1. **Elementary Spanish.** I, II. 3 Hrs. Staff

2. **Intermediate Spanish.** I, II. 3 Hrs. Continuation of Spanish 1. Staff

5. **Contemporary Fiction.** I. 3 Hrs. Staff

6. **Contemporary Drama.** II. 3 Hrs. Staff

Upper Division

109. **Grammar and Conversation.** I. 3 Hrs. Mr. Ashburn

110. **Advanced Conversation.** II. 3 Hrs. For sophomores or juniors PR: Spanish 109, or equivalent. Mr. Ashburn

†115. **Lyric Poetry.** I. 3 Hrs. PR: 12 hours of Spanish, or equivalent. Mr. Ashburn

†116. **Civilization and Culture.** II. 3 Hrs. PR: 12 hours of Spanish, or equivalent. Mr. Ashburn

211. **Nineteenth Century Literature to 1870.** I. 3 Hrs. PR: 12 hours of Spanish, or equivalent. Mr. Ashburn

212. **Spanish Literature Since 1870.** II. 3 Hrs. PR: 12 hours of Spanish. or equivalent. Mr. Ashburn

†Omitted, 1941-42

217. **Spanish American Literature and Culture.** I. 3 Hrs. PR: 12 hours of Spanish or equivalent. Mr. Mitrani

218. **Spanish American Literature and Culture.** II. 3 Hrs. Continuation of Course 217. PR: 12 hours of Spanish or equivalent. Mr. Mitrani

221. **Literature of the Golden Age.** I. 3 Hrs. PR: 18 hours of Spanish, or equivalent. Mr. Ashburn

222. **The Golden Age after Lope de Vega.** II. 3 Hrs. PR: Spanish 221. Mr. Ashburn

ITALIAN

Lower Division

1. **Elementary Italian.** I. 3 Hrs. Mr. Darby

2. **Intermediate Italian.** II. 3 Hrs. Continuation of Italian I. Mr. Darby

5. **Contemporary Readings.** I. 3 Hrs. Staff

6. **Advanced Readings.** II. 3 Hrs. Staff

109. **Composition and Conversation.** I. 3 Hrs. Mr. Darby

110. **Advanced Conversation.** II. 3 Hrs. Mr Darby

115. **Italian Literature.** I. 3 Hrs. General survey. Mr. Darby

116. **Italian Literature.** II. 3 Hrs. Continuation of course 115. Mr. Darby

211. **One Italian Author.** I. 3 Hrs. PR: 12 hours of Italian or equivalent. Mr. Darby

212. **Dante.** II. 3 Hrs. PR: 12 hours of Italian or equivalent. Mr. Darby

Social Administration

Professor SUNLEY and Instructor MCBROOM

The department of social administration offers on a graduate level a one-year social-work curriculum (30 semester hours of work) which leads to a professional Certificate of Social Work. This curriculum is primarily for the preparation of students for the field of the public-welfare services, but it has been designed to meet the needs not only of those students who plan to enter these services, but also of those who are now employed in the field.

Public social services in West Virginia were expanded by the passage of the Federal Social Security Act of 1935 and the West Virginia Public Welfare Law of 1936; and the growth of new welfare programs to treat the problems of the destitute, the unemployed, the aged, the mentally ill, the mentally defective, the physically handicapped, and other groups has created an unprecedented demand for persons who are properly equipped to handle these problems. The treatment of these problems calls for thorough and extensive professional education on a graduate level; institutes, extension courses, or correspondence work are not substitutes for graduate social work.

This one-year curriculum, including two semesters of field work, will, when accredited, fulfill all the requirements for junior membership in the American Association of Social Workers.

ADMISSION REQUIREMENTS

Applicants holding Bachelors' degrees from West Virginia University or from other institutions within the State approved by the State Board of Edu-

cation and authorized to confer such degrees, or from institutions outside the State standardized by membership in one of the associations of colleges and secondary schools, will be admitted, if other requirements are met, to the department of social administration upon making formal application to the head of the department and upon presenting to the Registrar an official transcript of the credits upon which their Bachelors' degrees are based. All applications, after being recommended by the head of the department, are submitted to the Graduate Council for final approval.

Applications should be made either in person or by letter at least three weeks before the opening of the semester or summer term for which registration is desired. Blank application forms may be obtained from the Registrar.

Students who have taken the recommended pre-professional work in the department of sociology and public welfare at West Virginia University will have fulfilled the undergraduate social-science requirements. Students who have not had this suggested sequence of undergraduate courses must have had an undergraduate background of at least 24 semester hours in the social sciences, including preferably at least 12 semester hours in one of the following fields: economics, political science, psychology, sociology, or selected courses in history.

Students who have not fulfilled the undergraduate pre-professional requirements may be admitted to the department of social administration on the condition that they must complete the necessary undergraduate requirements before they may be eligible for a professional Certificate of Social Work. The head of the department shall determine the courses to be used to meet undergraduate deficiencies.

All students, before admission, must present evidence of good health and personality characteristics which will make for success in the field. Lastly, the head of the department reserves the right to reject students who are otherwise satisfactory but who have not reached the age of 21.

THE CERTIFICATE OF SOCIAL WORK

The professional Certificate of Social Work is awarded on the basis of the following requirements:

1. A minimum (including field work) of 30 semester hours of graduate credit.
2. A minimum of two semesters of supervised field work in selected social agencies (450 clock hours).
3. A grade of C or better in all graduate work.

FIELD WORK

The department of social administration offers a total of two semesters of field work in family case work, child welfare, and probation work. Field work is a basic requirement for the professional Certificate of Social Work, and it is developed under the joint supervision of the department and the participating agencies so that it is truly an educational experience. Four semester hours of credit represent 15 clock hours per week of clinical work each semester.

COURSES OF INSTRUCTION

Graduate Division

301. **Case Work.** I. 3 Hrs. Principles and methods of case work as illustrated by study and discussion of selected cases. Miss McBroom

302. **Case Work.** II. 3 Hrs. Continuation of Social Administration 301 with special emphasis on case work in child welfare. PR: Social Administration 301. Miss McBroom

311. **Field Work.** I. 4 Hrs. At least 15 clock hours of field work each week in which the student assumes full responsibility under supervision for a selected group of cases. The clinical practice is made available in county departments of public assistance. Enrollment is limited to full-time professional social-work students; and the clock hours in the agency are arranged. PR: or corequisite: Social Administration 301. Miss McBroom

312. **Field Work.** II. 4 Hrs. Continuation of Social Administration 311 with emphasis on child welfare and probation work. PR: Social Administration 301 and 311. Miss McBoom

320. **Psychiatric Problems of Case Work.** II. 2 Hrs. Concepts implied in our understanding of human growth and personality development. PR: Psychology 1 and Social Administration 301. Miss McBroom

330. **The History of Social Work.** II. 3 Hrs. The European and American social-welfare developments; designed to give the students an understanding of present-day practices and trends of social work. Mr. Sunley

340. **Public-Welfare Administration.** II. 3 Hrs. History, organization, and function of the Federal, state, and local provision for the care of the dependent, neglected, delinquent, criminal, mentally ill, and mentally defective. Mr. Sunley

351. **Social Statistics.** I. 2 Hrs. Application of statistical methods to social problems and interpretation of statistics concerning dependency, mental illness, mental defectiveness, illiteracy, housing, and unemployment. Mr. Sunley

360. **The Family and the State.** II. 3 Hrs. Discussion of the legal relationships of the husband and wife, the duties of the husband and father, the child's right to education and support, guardianship, apprenticeship, adoption, illegitimacy, etc. Mr. Sunley

371. **Medical Information.** I. 3 Hrs. Orientation in the problems of health and disease, supplemented by discussions of the case-work implications of medical problems. Medical School Staff and Miss McBroom

381. **Public Assistance.** I. 3 Hrs. The Federal, state, and local organization for relief, with special attention to grants-in-aid, subsidies, and other characteristics of general relief, old-age assistance, aid to the blind, and aid to dependent children, and work relief. Mr. Sunley

Sociology and Public Welfare

Professors HARRIS and SUNLEY; Assistant Professor SAPOSNEKOW; Instructor MCBROOM

The entrance requirements of the accredited graduate schools of social work specify comprehensive undergraduate preparation in the social sciences. The greatest number of opportunities in the social-work field today are in the public-welfare services, and preparation for these services requires a broad and intensive program in the social sciences and related fields including economics, history, political science, psychology, and sociology. Of these fields of knowl-

edge. sociology and psychology are especially important. This undergraduate pre-professional social-work curriculum is unique in that it cuts across departmental lines, and its primary objective is to prepare students for entrance into the graduate professional schools of social work.

A department of social administration, which offers a program of professional social work preparation on a graduate level, was established at West Virginia University, September 1, 1939.†

SUGGESTED PRE-PROFESSIONAL SOCIAL-WORK PROGRAM

FIRST YEAR: Biology 1 and 2 (8); General Introductory Course in the Humanities 1 and 2 (8); foreign language (6); English 1 and 2 (6); and physical education and/or military science (2 or 4). Total, 30 or 32 hrs.

SECOND YEAR: Foreign language, if needed (6); Sociology 1 and 3 (6); Economics 1 and 2 (6); History 52 (3); Political Science 5 (3); English 65 (3); Zoology 151 (4); and physical education (2) or military science (4).

THIRD YEAR: Sociology 105 and 210 (6); Psychology 101, 122, and 229 (9); Political science 106 (3); History 134 (3); Economics 240 (3); Home Economics 160 (2); and electives (6). Total, 32 hrs.

FOURTH YEAR: Sociology 220, 224, 230, 231, 241, 260 and 272 (18); Economics 261 and 262 (6); and electives (8). Total, 32 hrs.
Psychology 116 (3); Philosophy 111 (3); History 53 and 133 (6); English 103 or 104 (3).

ELECTIVES FOR UPPER-DIVISION PRE-PROFESSIONAL SOCIAL-WORK STUDENTS

Sociology 232, 233, 234, and 243 (12); Political Science 208 and 209 (6); Psychology 116 (3); Philosophy 111 (3); History 53 (3); English 103 or 104 (3).

The recommended program for sociology majors who do not intend to enter professional social work is, for the freshman and sophomore years, substantially identical with the preceding pre-professional social-work program. For juniors and seniors not taking the pre-professional social-work program, a somewhat more liberal use of electives is recommended than is desirable for pre-professional majors.

COURSES OF INSTRUCTION

Lower Division

1.* **Introduction to Sociology.** I, II. 3 Hrs. Analysis of the social forces is followed by a description of social institutions and social processes. Mr. Harris and Saposnekow

3 or 103. **Rural Sociology.** II. 3 Hrs. Distinctive characteristics and problems of rural society. Mr. Harris

Upper Division

101. **Introduction to Sociology.** I, II. 3 Hrs. Analysis of the social forces, the social heritage, the more important social processes, of collective behavior, social control, and social change. Mr. Harris and Mr. Saposnekow

†For a detailed description of the program in this department, see page 156.
*Sociology 1 or 101 is a prerequisite to all other sociology courses.

105. **Urban Sociology.** II. 3 Hrs. Rise and growth of urbanism. Problems of population, health, housing and sanitation, education and recreation, poverty, and crime in the city. Mr. Saposnekow

210. **The Family** I. 3 Hrs. The modern family in its sociological, economic, and legal aspects. Mr. Harris

220. **The Field of Social Work.** I, 3 Hrs. Scope, organization, problems, and methods of the various fields of social work. Mr. Sunley

224. **Social Insurance.** II. 2 Hrs. Principles of Workmen's Compensation, Old Age and Survivor's Insurance, and Unemployment Compensation. Mr. Sunley

230. **Introduction to Public Welfare.** II. 3 Hrs. Orientation course dealing with provisions for public welfare with special reference to conditions in West Virginia. Mr. Sunley

231. **Race Problems.** I. 3 Hrs. Problems of race relationships, with special reference to present-day aspects of the American Negro problem. Mr. Harris

232. **American Minority Peoples.** I. 3 Hrs. After a brief historical survey of immigration, the economic, industrial, political, and social phases of the problems are discussed. Mr. Saposnekow

233. **Problems of Crime and Delinquency.** I. 3 Hrs. Readings, research projects, and inspection trips. Mr. Saposnekow

234. **Problems of Dependents and Defectives.** II. 3 Hrs. Readings, research projects, and inspection trips. Mr. Saposnekow

241. **Community Organization.** II. 3 Hrs. Practical and theoretical aspects of community and group organization, with special reference to community resources. Mr. Harris

243. **Introduction to Anthropology.** I. 3 Hrs. A descriptive survey with emphasis on social anthropology. Mr. Saposnekow

246. **History of Social Thought.** II. 3 Hrs. Development of sociological theory since Comte and Spencer. Mr. Saposnekow

251. **Contemporary Social Problems.** I or II. 3 Hrs. Analytical study of selected social problems which involve economic and political as well as social factors. Mr. Harris

240. **Social Control.** I. 3 Hrs. The why and the how of social-control processes. Mr. Harris

260. **Introduction to Child Welfare.** I. 2 Hrs. Methods and standards of care of dependent, neglected, and delinquent children in their own homes, institutions, and foster homes. Mr. Sunley

272. **Methods of Social Work.** II. 2 Hrs. A study of the relationships of various professional workers to the problem of understanding and treating human behavior. Miss McBroom

Graduate Division

391. **Seminar in Current Sociological Literature.** I or II. 2 to 4 Hrs. Enrollment by consultation with instructor Mr. Saposnekow

395. **Seminar in Principles and Methods of Research in Sociology.** I or II. 2 to 4 Hrs. Enrollment by consultation with instructor. Mr. Harris

The College of Education

Functions

Through its undergraduate courses, its seminar, its laboratory schools, and its encouragement and direction of educational investigation and research, the College of Education aims to contribute to the educational efficiency of West Virginia by inculcating a liberal and more scientific conception of the functions of the public schools of the state and by providing the professonal training of secondary-school teachers, principals, and supervisors, elementary-school principals and supervisors, city-school administrators, county superintendents, college teachers, educational counselors, and educational research specialists.

Organization

The College of Education comprises the College with its resident courses of instruction and its facilities for research; the University Demonstration High School with its opportunities for observation, student teaching, directed supervision, and experimentation; and the Laboratory Elementary School with its opportunities for graduate study of the progress of pupils.

The Standing Committees

SCHOLARSHIP: Miss Pollock and Messrs. Hill and Stemple.
LIBRARY: Messrs. Baldwin, Federer, and Wheat.

Pre-Education Adviser

The degree of Bachelor of Science in Education requires four years of college work, the first two years of which are done in the College of Arts and Sciences under the supervision of Prof. Elizabeth M. Stalnaker, pre-Education adviser. The student registers in the College of Education for the last two years.

Transfer Students

Applicants from junior colleges, normal schools, teachers colleges, colleges, other universities, or other colleges within this University will, upon receipt of official transcript, be admitted to this college with equal standing, provided the transcript shows graduation from a standard high school and the completion of 58 semester hours of approved freshman and sophomore work with an average of at least 1 honor point per credit hour. Students from other colleges who contemplate transferring to this college should so order their courses of study as to meet junior standing and should be fulfilling the curricular requirements for the certification of teachers as stated in the forthcoming Bulletin, **Teacher Certification Regulations at the University.**

Admission to The College of Education

The requirements for admission to the College of Education are (a) graduation from any approved curriculum in a first-class high school and (b) 58 semester-hours of approved college work with an average of at least one honor point per credit hour.

Upper-Division Advisers

Each junior and senior in the College of Education will be assigned an adviser according to his field of major interest. The adviser will direct both his academic and his professional courses toward graduation and eligibility for certification.

Requirements for Graduation

To be eligible for recommendation for the degree of Bachelor of Science in Education, a candidate must:

1. Comply with the general regulations, as announced in the General Information section (Part II) of this Catalogue, concerning entrance, advanced standing, classification, examination, marks, honor points, etc.

2. Satisfy the General Requirements for certification, listed in the above **Bulletin (Teacher Certification Regulations at the University).**

3. Complete the required 20 semester hours of approved courses in Education, listed in the above **Bulletin.**

4. Select and pursue two teaching fields.

5. Adhere to the patterns, listed in the above **Bulletin,** in completing the prescribed number of hours of subject matter in each teaching field.

6. Present 128 semester hours of approved college credit, with a general average of 1 honor point per credit hour and with an average of 1 honor point per credit hour in each teaching field and in Education.[1] (Only credit earned in West Virginia University will be used in computing honor points for graduation.) At least 100 of the 128 hours must be in academic subjects. Two hours of school health or hygiene may be included in the 100 hours. The candidate must have been enrolled in the College of Education for at least 26 credit hours.

7. Be at least 18 years of age, of good moral character, interested in educational work, and mentally, physically, and otherwise qualified to perform the duties of a teacher.

Fulfillment of the requirements for graduation from the College of Education qualifies a candidate to apply for recommendation for a West Virginia first-class secondary-school teaching certificate in at least two approved teaching fields. For instruction on applying for a State certificate, see the above **Bulletin.**

COURSES OF INSTRUCTION

Professor Emeritus Deahl; Professors Allen, Baldwin, L. B. Hill, Hudelson, Noer, Parsons, Pollock, Stemple, and Wheat; Assistant Professors Colebank and Gaar; Assistant Teacher Trainer White; Instructors Boggess, Cook, Coplin, Cubbon, Federer, C. W. Hill, Marshall, Neill, Odell, Paff, Soupart, and Wilt; Teachers Bowlby, Brochick, Bryan, Davis, Fizer, Hatfield, Hinzman, Jamison, Lashbrook, Martin, Proudfoot, Roller, Smith, and Woofter; Graduate Assistants Cox and Liston.

Courses in Education are open only to students of junior, senior, and graduate standing. The following courses are required of high-school teachers

[1]Beginning July 1, 1944, each of these minimum honor-point averages will be 1.2.

for recommendation for a first-class certificate: Junior year, Ed. 106, 109, and 2-4 hours of approved electives; Senior year, Ed. 120, 150-170, 214, 224 and enough additional hours chosen from the following approved electives to meet the minimum requirement of 20 hours in Education: Ed. 101, 112, 203, 221, 222, 231, 233, 236, 252, 281, 282, 284, 285, 291, 150-170 in a second teaching field, 224 (2 hrs.) in a second teaching field, and Psych. 1 (2 hrs.).

NOTE: For the kinds of graduate certificates for which the following courses are required or approved see pages 166 to 168, and for the undergraduate certificates see the Bulletin, **Regulations Governing Teacher Selection, Guidance, Training, and Certification.**

Undergraduate Division

101. Introduction to Vocational Teaching. II. 2 Hrs. A survey of the field of vocational education with particular emphasis on orientation as the foundation for occupational preparation. Mr. Allen

106. Introductory Educational Psychology. I, II. 3 Hrs. Should be taken in junior year. Mr. Baldwin, Mr. Hill, Miss Pollock, and Mr. Wheat

109. Secondary Education. I, II. 2 Hrs. Introduction to high school organization. Should be taken in Junior year. Mr. Stemple and Mr. Baldwin

112. High School Tests and Measures. I, II. 2 Hrs. PR or parallel: Ed. 106. Mr. Stemple and Mr. Wheat

120. Principles of Teaching in Secondary Schools. I, II. 2 Hrs. (3 Hrs. for students only who have had 3 Hrs. of Ed. 109.) Open only to those who qualify for the student teaching block. Mr. Hill

140. Typewriting. I. 2 Hrs. Introductory course open only to College of Education registrants who are candidates for a secondary-school teaching certificate in commerce. To be taken not earlier than the second half of the sophomore year and not later than the first half of the junior year. This course, or evidence of comparable proficiency, is prerequisite to all other courses in typewriting. Mr. Odell and Staff

141. Typewriting. II. 1 Hr. Open only to College of Education registrants who are pursuing commerce as a teaching field. To be taken during the junior year. PR: Ed. 140, or evidence of comparable proficiency. (Three hours of college typewriting or evidence of comparable proficiency is required before materials and methods of high-school teaching may be taken.) Mr. Odell and Staff

142. Shorthand. I. 3 Hrs. Open only to College of Education registrants who are pursuing commerce as a teaching field. To be taken the first semester of the junior year with Ed. 140. Introductory course. Mr. Odell and Staff

143. Typewriting. II. 1 Hr. Continuation of Ed. 141, with same restrictions. May be elected simultaneously with Ed. 141. PR: Ed. 140. Mr. Odell and Staff

144. Shorthand. II. 3 Hrs. Shorthand dictation. PR: Ed. 142 and the ability to operate a typewriter. This course must be completed prior to materials and methods of high-school teaching Mr. Odell and Staff

145. Shorthand. I. 3 Hrs. Advanced dictation and transcription. PR: Ed. 142 and 144, or evidence of comparable proficiency. This course should be taken prior to materials and methods of high-school teaching. Mr. Odell and Staff

150-170. Materials and Methods of High School Teaching. I, II. 2 Hrs. Special methods in the various secondary-school teaching fields. For West Virginia certification these courses are an integral part of Ed. 224.

May also be chosen as a two-hour elective by students who are registered for student teaching in other fields.

The various sections of this course, with their instructors, follow:

150. **Biology.** I, II. 2 Hrs. Mr. Allen

151. **Science.**[1] I, II. 2 Hrs. Mr. Allen

152. **Physical Education.** I, II. 2 Hrs. Mr. Cubbon and Miss Marshall

155. **Library Science.** I, II. 2 Hrs. Miss Martin

160. **Agriculture.** I, II. 3 Hrs. Mr. Gaar or Mr. Parsons

161. **English.** I, II. 2 Hrs. Miss Soupart and Miss Jamison

163. **Home Economics.** I, II. 2 Hrs. Miss Boggess and Miss Lashbrook

164. **Industrial Arts.** I, II. 2 Hrs. Mr. Bowlby

165. **Mathematics.** I, II. 2 Hrs. Miss Wilt

166. **Physical Science.** I, II. 2 Hrs. Mr. Federer

167. **Social Science.** I, II. 2 Hrs. Miss Coplin

168. **Art.** I, II. 2 Hrs. Mrs. Roller

169. **Music.** I, II. 2 Hrs. Mr. Paff

170. **Commerce.** I, II. 2 Hrs. Mr. Odell

203. **Organization and Administration of Adult Education.** II. 2 Hrs. Mr. Allen

214. **Advanced Educational Psychology.** I, II. 2 Hrs. PR: Ed. 106. Not open to juniors. Should be taken parallel or following Ed. 224. Open for graduate credit only to those with 6 semester hours of prerequisite work in psychology and/or educational psychology. Mr. Baldwin and Mr. Wheat

221. **Audio-Visual Instruction.** I, II. 2 Hrs. Uses of sensory techniques in teaching. Mr. Allen

222. **Current Practices in Secondary Education.** I. 2 Hrs. A study of current practices in the secondary schools of this and other countries. Especial emphasis is placed on the Eight-Year Experiment in the thirty schools. Miss Pollock

224. **Student Teaching.** I, II. 3 Hrs. PR: Evidence of teaching traits as shown by personal attitudes, industry, character, general intelligence, good speech habits, physical and mental fitness; completion of approximately 75% of the hours required in each of two teaching fields and at least 7 semester hours in Education, with a general honor-point average of 1.0 and an average of 1.0 in each teaching field and in Education. This course is to be taken simultaneously with Ed. 120, Principles of Teaching in Secondary Schools, and Ed. 150-170. Ed. 224 will be offered in the University Demonstration High School or in other student teaching centers. One half of the students should reserve a full half day each morning and the other half should reserve the entire afternoon for this work. All students must reserve Monday, 7 to 9 p. m. bi-weekly, for teachers' meetings. Application for registration should be made to Mr. L. B. Hill early in the preceding semester. Student teaching will be given in the following subject-matter fields: agriculture, art, biology, commerce, English, home economics, industrial arts, library science, mathematics, music, physical education, physical science, and social studies.

Mr. Hill, Mr. Allen. Mr. Colebank and Mr. Gaar or Mr. Parsons

231. **Philosophy of Education.** I. 2 Hrs. Mr. Baldwin

233. **Educational Sociology.** II. 2 Hrs. Mr. Baldwin

[1]A special section available as an elective for those selecting some science as a second or third teaching field. All branches of science are considered. Registration not necessarily concurrent with Ed. 120 and 224.

236. **The Curriculum.** II. 2 to 3 Hrs. PR: Ed. 106. Open only to seniors and graduates. Mr. Stemple

246. **Principles of Supervision.** 2 Hrs. A basic course dealing with the general principles of elementary-school, junior high-school, and senior high-school supervision as applied to the sifted content of each subject. Offered in 1942-43 and alternate years. Mr. Hill

252. **Vocational Guidance.** I. 2 Hrs. PR: Ed. 106, 109, 112. Programs and techniques in occupational orientation. Mr. Allen

257. **Organization and Administration of Vocational Education.** I. 2 Hrs. PR: Ed. 224. Mr. Allen

258. **Education for Special Groups.** II. 2 Hrs. A study of the techniques and organization of instruction of adults and teen-age youth not in attendance at ordinary day-school classes. Part-time, evening, and dull-season classes are among the educational projects considered. Offered in 1942-43 and alternate years. Mr. Allen

262. **Vocational Home Economics in Secondary Schools.** I, II. 2 Hrs. PR or parallel: Ed. 120, 163, and 224; home economics, 25 hours. Primarily for seniors and teachers of home economics. Miss Noer

281. **History of Elementary and Secondary Education in the United States.** I. 2 Hrs. Mr. Hill

282. **Development of Modern Education.** II. 2 Hrs. Comparative study of schools in the leading nations of Europe since 1800. Miss Pollock

284. **Pupil-Personnel Administration.** I. 2 Hrs. Pupil accounting, guidance. extra-curricular activities, and control. PR: Ed. 106. Open only to seniors and graduates. Mr. Stemple

285. **The Junior High School.** I. 2 Hrs. PR: Ed. 106. Open only to seniors and graduates. Mr. Stemple.

291. **Exploratory Reading.** I, II. 2 Hrs. For any teachers or administrators who feel the need for a wide acquaintance with books. The work is planned to meet the individual needs of students. Miss Pollock

294. **Organization of Industrial Arts.** II. 2 Hrs. An advanced course. Preparation of comprehensive programs of industrial arts at all scholarship levels. Offered in 1942-43 and alternate years. Mr. Allen

Graduate Division

308. **Psychology of Arithmetic.** I. 2 Hrs. Mr. Wheat

309. **Psychology of Reading.** II. 2 Hrs. Mr. Wheat

322. **Organizing Programs of Audio-Visual Instruction.** II. 2 Hrs. PR: Ed. 221. An advanced course dealing with problems of planning extensive programs of using movie, talkie, radio, slides, charts, exhibits, etc., for instructional purposes. Mr. Allen

326. **Practice in the Supervision of Elementary-School Instruction.** II. 2 to 3 Hrs. PR or parallel: Ed. 316 and Ed. 246. Mr. Wheat

327. **Demonstration and Practice in the Supervision of Secondary-School Instruction.** II. 2 to 3 Hrs. PR: Consent of instructor. An opportunity to observe approved processes in classroom supervision and to practice, under guidance, the art of improving classroom instruction. Mr. Hill

339. **Public-School Organization and Administration.** I. 3 Hrs. An orientation course for present and prospective school administrators, with emphasis upon the problems which grow out of the county unit. Required as a basic course of all who specialize in educational administration. PR: 20 hours of Education and consent of instructor. Mr. Baldwin

340. **Public-School Finance.** II. 3 Hrs. PR or parallel: Ed. 339 and consent of instructor. Mr. Baldwin

341. **School Buildings and Equipment.** I. 2 Hrs. PR or parallel: Ed. 339 and consent of instructor. Mr. Baldwin

343. **School Surveys.** I. 2 Hrs. Development of the educational survey as an instrument for effecting progressive educational procedure. PR or parallel: Ed. 339 and consent of instructor. Mr. Baldwin

344. **Staff-Personnel Administration.** II. 2 Hrs. Selection, induction, direction, evaluation, improvement, and promotion of members of the supervisory, instructional, research, clerical, and maintenance staffs. PR or parallel: Ed. 339 and consent of instructor. Mr. Baldwin

353. **The Secondary-School Principal.** II. 2 to 3 Hrs. Open only to graduate students in Education with teaching experience in high school. Mr. Stemple

356. **The Elementary School Principal.** II. 2 to 3 Hrs. PR or parallel: Ed. 316 and Ed. 339. Mr. Wheat

360. **Problem in Education.** I, II. 1 or 2 Hrs. PR: Consent of graduate adviser Staff

372. **Statistical Methods in Education.** I. 2 Hrs. PR: 20 hours of Education, including Ed. 112 or equivalent. Mr. Hudelson

390. **Advanced Course for Teachers of English.** 2 Hrs. PR: Consent of instructor. Miss Pollock

392. **Materials for General Reading.** II. 2 Hrs. Study of materials for secondary schools and for adult classes. PR: Ed. 291. Miss Pollock

399. **Techniques of Educational Research.** II. 2 Hrs. PR or parallel: Ed. 372. Mr. Hudelson

Thesis. I, II. 1 to 4 Hrs. Candidates for the Master's degree in Education may, with the consent or upon the recommendation of the graduate adviser, drop Ed. 360 and enroll for a thesis with a higher maximum of credit. One course or the other is required. Staff

GRADUATE PROFESSIONAL CURRICULA

THE CURRICULUM FOR SUPERINTENDENTS LEADING TO THE DEGREE OF MASTER OF ARTS[1]

Required:

- Ed. 231. Philosophy of Education, or Ed. 233, Educational Sociology
- Ed. 236. The Curriculum
- Ed. 246. Principles of Supervision
- Ed. 316. Psychology of Elementary-School Subjects
- Ed. 326. Practice in the Supervision of Elementary-School Instruction
- Ed. 338. Secondary-School Organization, or Ed. 353, The Secondary School Principal
- Ed. 339. Public-School Organization and Administration
- Ed. 340. Public-School Finance
- Ed. 372. Statistical Methods in Education
- Ed. 399. Techniques of Educational Research
- Ed. 360. Problem in Education or Thesis

Electives (to be chosen with adviser's approval):

- Ed. 203. Organization and Administration of Adult Education
  or
- Ed. 221. Audio-Visual Instruction

[1]Completion of this curriculum also fulfills the scholastic requirements for the superintendent's certificate. Other requirements are 5 years' experience in public schools of West Virginia, 3 of which shall have been as principal of either high school or elementary school; or as superintendent or assistant superintendent in county and/or district in West Virginia; a health certificate.

or
Ed. 257. Organization and Administration of Vocational Education
and
Ed. 341. School Buildings and Equipment
or
Ed. 343. School Surveys
or
Ed. 344. Staff-Personnel Administration

Total, 30 Hours

THE CURRICULUM FOR HIGH-SCHOOL PRINCIPALS LEADING TO THE DEGREE OF MASTER OF ARTS[2]

Required ---------- 14 Hours

High-School Administration
- Ed. 339. Public-School Organization and Administration ---------- 2 Hrs.
- Ed. 353. The Secondary-School Principal ---------- 2 Hrs.

Supervision of High-School Instruction
- Ed. 246. Principles of Supervision ---------- 2 Hrs.
- Ed. 327. Demonstration and Practice in the Supervision of Secondary-School Instruction ---------- 2 Hrs.

Other required work for degree
- Ed. 372. Statistical Methods
- Ed. 399. Techniques of Educational Research
- Ed. 360. Problem in Education or Thesis

Electives (from other graduate courses in Education or from other fields by permission of adviser) to complete a total of 30 hours.

Total, 30 Hours

THE CURRICULUM FOR ELEMENTARY-SCHOOL PRINCIPALS LEADING TO THE DEGREE OF MASTER OF ARTS[1]

- Ed. 231. Philosophy of Education, or Ed. 233, Educational Sociology
- Ed. 236. The Curriculum
- Ed. 246. Principles of Supervision
- Ed. 316. Psychology of Elementary-School Subjects (Other approved courses in the field, e.g., Ed. 308 and/or 309, may be substituted.)
- Ed. 326. Practice in the Supervision of Elementary-School Instruction
- Ed. 339. Public-School Organization and Administration
- Ed. 356. The Elementary-School Principal
- Ed. 372. Statistical Methods in Education
- Ed. 399. Techniques of Educational Research
- Ed. 360. Problem in Education or Thesis

Electives (in academic fields especially) to complete a total of 30 hours (to be chosen with adviser's approval)

Total, 30 Hours

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[1]Completion of this curriculum also fulfills the scholastic requirements for the elementary-school principal's certificate. Other requirements are 2 years' successful teaching experience in elementary school, and 1 year's successful administrative experience in the elementary schools of West Virginia; or 5 years' administrative experience in the elementary schools of West Virginia.

[2]Completion of this curriculum also fulfills the scholastic requirements for certification in West Virginia as a high-school principal. Other requirements for the high-school principal's certificate are (1) graduation from a standard college or university and qualifications for a first-class high-school teaching certificate; (2) two years of successful high-school teaching or administrative experience; (3) one year's successful administrative experience in high schools of West Virginia; and (4) a health certificate. Since most of the courses listed above have prerequisites, the consent of the instructor must be obtained before enrollment.

THE CURRICULUM FOR SECONDARY-SCHOOL CLASSROOM TEACHERS LEADING TO THE DEGREE OF MASTER OF ARTS

Required:

Graduate courses in Education ---------- 10-20 Hours
Suggested courses ---------- 12 Hours

Ed. 203. Adult Education
Ed. 222. Current Practices
Ed. 231. Philosophy of Education
Ed. 236. The Curriculum
Ed. 291. Exploratory Reading
Ed. 360. A Problem in Education or Thesis

Graduate courses in a recognized teaching field
Required ---------- 10-20 Hours
Graduate courses in tributary or supplemental fields
Required ---------- 0-10 Hours
Total, 30 Hours

All courses are to be selected by the candidate subject to the approval of his adviser so as to fulfill the above requirements.

THE CURRICULUM FOR ELEMENTARY-SCHOOL CLASSROOM TEACHERS LEADING TO THE DEGREE OF MASTER OF ARTS

Required:

Ed. 231. Philosophy of Education
Ed. 236. The Curriculum
Ed. 316. Psychology of Elementary-School Subjects

(Other approved courses in this field, e.g., Ed. 308 and/or Ed. 309, may be substituted for Ed. 316).

Ed. 360. Problem in Education or Thesis

Electives in academic fields (to be chosen with adviser's approval)—12 hours required

Free electives (in Education or academic fields) to complete a total of 30 hours (to be chosen with adviser's approval)

Total, 30 Hours

THE CURRICULUM LEADING TO THE DEGREE OF MASTER OF SCIENCE IN HOME-ECONOMICS EDUCATION

Required:

Graduate courses in Education ---------- 10-20 Hours
Graduate courses in home economics ---------- 10-20 Hours
Graduate courses in tributary fields ---------- 0-10 Hours
Total, 30 Hours

All courses selected by the candidate are to be approved by the adviser so as to fulfill the above requirements.

The College of Engineering and Mechanic Arts

The School of Mines

ORGANIZATION

For the purpose of administration and instruction, the College of Engineering and Mechanic Arts is organized into the following departments:

The department of chemical engineering (Ch.E.)
The department of civil engineering (C. E.)
The department of electrical engineering (E. E.)
The department of mechanical engineering (M. E.)
The department of mechanics (M.)

All the mining and industrial extension work of the University is organized under the School of Mines. For the purpose of administration the school is divided into the following divisions:

The department of mining engineering (E. M.)
The department of mining and industrial extension

The College of Engineering

The purpose of the College of Engineering and Mechanic Arts is to instruct students in the fundamental sciences and arts upon which all engineering rests, and to impart such special and technical knowledge of the various branches of engineering as will enable its graduates to enter them and maintain themselves while gaining their professional experience. To accomplish this purpose the work of the college is classified under the following curricula: chemical engineering. civil engineering, electrical engineering, and mechanical enginering.

For those students desiring a broader training than is offered in the four-year curricula, a five-year course may be taken leading to two degrees. The latter course will also benefit those who desire to take their work more leisurely, since fewer semester hours are required in any given year.

The work of the first year is common in chemical, civil, electrical, and mechanical engineering. This is also true for mining engineering, which is taught in the School of Mines. Because of this common course, the student may postpone his choice of engineering branch until the end of the first year. By that time he becomes sufficiently acquainted with the various fields to make a wiser selection than would be possible on first entering college. In the second year differentiation starts, increasing year by year.

The object of the chemical engineering curriculum is to qualify students to design, build, and manage manufacturing plants, in which the products of

manufacture are based on chemical processes, and to fit them for professional employment as industrial chemists and chemical engineers. In addition to many courses which are required of all students, two options are offered in the upper-class work—one in metallurgy and the other in the field of ceramics.

The course in civil engineering is planned to give the student a substantial foundation in the fields of highway, railway, sanitary, municipal, structural, and hydraulic engineering. The field of civil engineering is one of the broadest of engineering professions, and yet the work of the civil engineer rests upon a relatively compact body of scientific principles. In the third and fourth years the student has a choice between a general civil engineering option and a sanitary engineering option. If he takes the civil engineering option he may choose between work in hydraulic engineering and in highway engineering.

The course in electrical engineering is planned to give the student a thorough grounding in the engineering features connected with the design, construction, and operation of the electrical part of engineering properties. In the professional work of the last two years theory, problem work, design, and laboratory practice are combined to give the student a broad training. In the fourth year the student is given a choice between a number of options.

Mechanical engineering deals essentially with the design and construction of machinery, the development and utilization of power, and the production in industry. To this end the student takes a considerable amount of shop work in addition to the theoretical courses in the fundamental sciences of mathematics, chemistry, and physics. In the upper-class work attention is given to machine design, power-plant design, refrigeration, heating and ventilation, as well as to production methods and industrial management.

The School of Mines

The School of Mines, established at the University in 1926, was given a degree-granting status in July, 1930. For administrativve purposes the School of Mines is divided into two departments: (1) the department of mining engineering, and (2) the department of mining and industrial extension. The department offices, laboratories, classroom, museum, and model rooms are located in Mechanical Hall.

Resident Instruction

The School of Mines offers (1) a four-year course leading to the degree of Bachelor of Science in Engineering of Mines, with options in coal-mining and oil and gas engineering; and (2) a combined science and engineering course, extending over five years, leading to the degree of Bachelor of Science (at the eud of the fourth year), and Bachelor of Science in Engineering of mines (at the end of the fifth year).

The Engineering Experiment Station

The chief functions of the Engineering Experiment Station are the encouragement and prosecution of research and investigations that will enhance the industrial and economic welfare of the people of West Virginia and the stimulation and training of graduate students in research activities. The research undertaken by the Station therefore is primarily concerned with

investigations in the production, processing, and utilization of the natural resources of West Virginia; investigations that will aid the existing industries of the State and promote the development of new industries; and investigations that will aid in the planning, design, and development of the public works of the State. As a consequence of this program, the subjects receiving particular attention by the staff of the Station are coal, oil, gas, clays, stone, sand, timber, water power, sewerage, sanitation, and road building.

The Station will assist in compiling surveys and in conducting investigations of the industrial requirements and possibilities of any region or community in the State. It cooperates with the West Virginia University Bureau for Government Research, the Agricultural Experiment Station, the State Road Commission, the State Geological Survey, the State Department of Health, the School of Mines, the national engineering societies, and state or national agencies whose assistance may promote the more effective fulfillment of the Station's functions.

To aid industrial organizations in this State that lack facilities and personnel to undertake important research and investigations which arise in the development of their operations, the Station stands ready where time and facilities permit, to assist in the prosecution of investigations on their fundamental problems. Such services are free, but any special equipment, materials, or labor that may be needed must be supplied by the organization for which the work is done.

The results of the studies, surveys, investigations, and research of the Experiment Station are published in bulletin form and may be obtained upon application to the Director of the Station.

Mining and Industrial Extension

The department of mining and industrial extension in the School of Mines conducts courses of instruction in practical subjects in various sections of the State where groups of individuals wish to study and receive training in subjects pertaining to their every-day work. The department also aims to disseminate useful knowledge which has been amassed by research studies at the University to all classes of citizens in the State, and in this way to bring the University and its opportunities for learning to various groups of students who desire to enroll in its extension department.

The Short Course in Coal Mining:

The Short Course in Coal Mining offered by the department of mining and industrial extension gives an opportunity to operators, officials, and employees of mining companies to obtain instruction pertaining to their work. The subjects covered in the short course are: explosives, methods of mining, timbering, mine gases, mine ventilation, hoisting, haulage, mine drainage, safety lamps, mine management, electricity in mines, mine fires and explosions, safety organization and administration, mining arithmetic, and elementary drawing.

Special attention is given to students desirous of preparing themselves for the teaching of mining classes under the Smith-Hughes and George-Deen Acts.

At the close of the short course the West Virginia Department of Mines conducts an examination for mine foremen and fire bosses.

Tuition is free. It is believed that $60.00 should cover all necessary expenses for the six weeks, excluding traveling expenses.

The twenty-seventh annual session of the Short Course in Coal Mining will begin on Monday, June 9, and continue until Saturday, July 19, 1941. For further information write for the special announcement of the Short Course in Coal Mining.

The Short Course in Welding:

In cooperation with the Vocational Division of the State Department of Education and with the Mechanical Engineering department of the University, short courses in electric and oxygen-acetylene welding are conducted for eight-week periods. Groups of ten men are enrolled for an eight weeks' course which meets daily from 8:00 a. m. to 5:00 p. m. These courses are given at Morgantown under a resident instructor.

The Short Course in Gas Measurement:

The second Appalachian Gas Measurement Short Course was conducted in 1939 by the University in cooperation with the Public Service Commission of West Virginia, the West Virginia Oil and Natural Gas Association, the American Gas Association, and public utilities and industries producing, selling, or consuming natural gas in large quantities in West Virginia and surrounding states. This course provides instruction in the theory and practice of gas measurement and pressure regulation and is designed to be of interest to executives and officials of gas companies as well as to metermen. The course covers a period of three days and will be repeated on August 18, 19, 20, 1941.

Vocational Courses Offered in Extension:

Courses in foreman training and other special courses for those in industry are offered in centers where there is sufficient interest. The services of the Department are available for any city or town desiring to establish night schools and part-time schools.

Extension courses in mining are offered under the direction of the University at various mining towns throughout the State. The instruction in these courses is carried on by University extension instructors who visit each center every week. At the present time the work is planned on a four-year basis to cover the following courses: mine gases, safety lamps, ventilation, timbering, explosives, haulage, prevention of mine accidents, mine waste, drainage and pumping, mining methods, foremanship, electricity, mine fires and explosions, and coal geology. In each of these unit courses, particular emphasis is placed on safety features, state mining laws, and application of arithmetic to mining problems.

An intensive course for the training of mine foremen in cooperation with the Federal Board of Vocational Education is also offered in certain sections of the state.

Fire Service Extension School:

An annual training school for firemen is conducted each year in cooperation with the State Fire Marshal, the National Board of Fire Underwriters, and the West Virginia Inspection Bureau. This school is conducted under the supervision of G. R. Spindler, Director of Fire Service Extension Schools. Extension courses in fire-department evolutions, fire protection, and fire preven-

tion are offered under the direction of the University in cooperation with the State Fire Marshal at various fire departments in West Virginia. The instruction in these courses is carried on by local University extension instructors in the various departments. The classes meet once each week for approximately 30 weeks and cover the following subjects: motor equipment, pumps, hose, ropes, ladders, rescue, attack and extinguishment, salvage, ventilation, gases, inspection, overhauling, and minor equipment. Approximately one fifth of the time is spent on actual fire-department evolutions.

Trade Extension Classes in Ceramics:

Classes are being conducted by local instructors at Newell, West Virginia, in the various phases of the ceramics industry, including ceramics art, chemistry, and physics as applied to ceramics. These classes are attended by persons employed in the industry in that vicinity as well as others having an interest in the subject.

The Coal Conference on Combustion:

The School of Mines sponsored in 1940 the fourth Coal Conference on Combustion to be held in West Virginia. Combustion was adopted as the theme of the conference in recognition of the fact that the field of combustion represents one of the greatest opportunities for research in coal as well as one of the major problems confronting the industry. The Conference will be repeated in 1941 at Morgantown; the dates will be announced later.

Water Purification Conferences:

An annual conference on water purification is held each year in cooperation with the State Department of Health. A number of out of state engineers are invited to present papers at the conference. The State Department of Health and College of Engineering cooperate in the program. The papers presented at this conference are printed in bulletin form and the work is followed up by personal visits in the field. The conference is usually held at Charleston or Morgantown. These conferences are held under the supervision of H. W. Speiden.

Electric Meter Conferences:

Conferences for men interested in the metering of electrical energy will be arranged to suit the convenience of those interested. Each group should consist of from eight to 12 men who have at least a working knowledge of elementary algebra and trigonometry. Conferences may be arranged by writing to Professor A. A. Hall, and are usually expected to be for 10 day periods devoted to current practices as well as to the basic theory of electrical meters, their connections and testing.

Mine Electrician's Conference:

Conferences for men engaged in the application of electrical energy to the mining industry will be arranged for at certain times, in connection with the department of electrical engineering, when such work does not conflict with the regular University classes. Such groups should consist of not less than ten or more than fifteen men who should have at least a working knowl-

edge of arithmetic and elementary electrical laws. Conferences may be arranged for by writing to Mr. G. R. Spindler, Assistant Director of Mining Extension, and are expected to be from three to five day periods of class study and laboratory work in the department of electrical engineering.

Road School:

A road school is offered in cooperation with the State Road Commission of West Virginia. This course is open to engineers interested in highway construction. The subjects of road construction and road maintenance are treated in a practical manner, most of the teaching work being done by engineers in the employ of the commission. This school is conducted under the supervision of Professor W. S. Downs.

The Standing Committees

ENGINEERING SCHEDULES: Professor Hayes, Associate Professor Staab (School of Mines), Assistant Professors Brown, E. C. Jones, and Lawson.

ENGINEERING SOCIETY: Professors Forman, Grumbein, Boomsliter, Koehler, and Assistant Professor Baker.

LIBRARY: Professor Hayes, Assistant Professor Brown, and Instructor Seibert.

COMMITTEE ON SCHOLARSHIP: Professors Hall and Koehler and Associate Professor C. H. Cather.

BACCALAUREATE DEGREES

To receive any of the baccalaureate degrees conferred in the College of Engineering or the School of Mines the student must have satisfied all the entrance requirements and, except in the case of the five-year curricula, must have received credit for 152 hours.[1] Included in this 152 hours is our Summer Session of five weeks, which for civil and mining students is taken at the summer surveying camp located near Terra Alta. For the chemical, electrical, and mechanical students the work is given in Mechanical Hall.

SUBSTITUTIONS

The following substitutions are regularly allowed in addition to special substitutions listed elsewhere:

Band for Military 3 and/or 4.
Chemistry 1, 2, and 9 for Chemistry 3 and 4.
Chemistry 5, 6, 106, 15 or 115 (2 to 5 hrs.) for Chemistry 10.
Chemistry 5, 10, or 105 for Chemistry 105s.
Chemistry 10, 15, or 107 for 2 hrs. of Chemistry 5 or 6.
Chemistry 115 for Chemistry 15.
Economics 1 and 2 or 1s and 2s for Economics 103.
Economics 111 or 111s for Business 110.
E.E. 211 for E.E. 2.
English 11s and 12s for either English 1 or 2.
Mathematics 51s and 52s for Mathematics 5.
M.E. 24 for C.E. 10.
Any six hours for Military 1, 2, 3, and 4 for students who enter with 58

[1]Students matriculating with 58 or more hours of credit may gradute with 150 hours, since physical education is not required of such students.

or more hours of college credit and for students exempted from military training.

Physics 1, 2, 3, 4, 109 and 110 for Physics 105, 106, 107, and 108.

Any two hours for Physical Education 1 and 2 for students exempted from Physical Education.

Public Speaking 11 for Public Speaking 13.

THESIS

Any candidate for a baccalaureate degree in engineering may with the consent of his major professor prepare a thesis on some subject relating to a special branch of engineering or other department of applied science. It will be presented for approval first to the instructor under whose guidance it has been prepared, then to the head of the department in which the degree is to be conferred. A typewritten copy of the thesis prepared in accordance with official specifications and signed by both the instructor in charge and the head of the department, must be placed in the University library before graduation.

THE COLLEGE OF ENGINEERING CURRICULA

1. A four-year curriculum leading to the degree of Bachelor of Science in Chemical Engineering, with options in metallurgy and ceramics.

2. A four-year curriculum leading to the degree of Bachelor of Science in Civil Engineering, with option in sanitary engineering.

3. A four-year curriculum leading to the degree of Bachelor of Science in Electrical Engineering.

4. A four-year curriculum leading to the degree of Bachelor of Science in Mechanical Engineering.

5. Combined science and engineering curricula extending over five or more years leading to the degree of Bachelor of Science, and Bachelor of Science in Engineering.

The Freshman Schedule

In order to permit all students in the College of Engineering and the School of Mines to have a year in which to find out definitely what courses they wish to pursue, the first year of all engineering curricula is made uniform. To assist the student in making an intelligent choice, a series of weekly lectures is given throughout the first semester explaining the work of the several branches of engineering.

FIRST YEAR

(Identical for all engineering and mining courses)

First Semester	*Hrs.*	*Second Semester*	*Hrs.*
Eng. 1—Comp. and Rhet.	3	Eng. 2—Comp. and Rhet.	3
Math. 3—College Algebra	4	Math. 5—Analytical Geom.	4
Math. 4—Plane Trig.	2	Chem. 4—Inorganic Chem.	4
Chem. 3—Inorganic Chem.	4	Mil. 2—Military Science	1
Mil. 1—Military Science	1	P. E. 2—Ser. Prog. (Men)	1
P. E. 1—Ser. Prog. (Men)	1	C. E. 1—Surveying	2
M. E. 20—Mechanical Drawing	3	M. E. 26—Descriptive Geom.	3
G. 1—Engineering Lectures	—		—
	18		18

CHEMICAL ENGINEERING

The object of the four-year course in chemical engineering is to qualify young men to design, build, and manage manufacturing plants in which the products of manufacture are based on chemical processes, and to fit men for professional employment as industrial chemists and chemical engineers.

The curriculum outlined on the following page includes fundamental courses in inorganic, analytical, organic, and physical chemistry; in shop practice, mechanical drawing, and chemical plant design; in physics, theoretical and applied mechanics, mechanical, and electrical engineering; in mineralogy, metallurgy; and in industrial chemistry and chemical engineering. This curriculum is designed to give the student a thorough knowledge of the basic principles in those subjects which experience has shown are essential to one entering the chemical engineering profession.

Students should take all required shop courses and Qualitative Analysis in the summer session between their first and second years. Many students have found it to their advantage to take Physical Chemistry 260 and 261 in the summer session. There are two options offered: ceramic and metallurgical, as outlined below. Thesis subjects will usually be selected from the problems related to the development of the natural resources of West Virginia as foundations for chemical industries.

Students preparing to take the course in chemical engineering should present German for entrance. A student may secure a broader training in language, economics, history, science, applied chemistry, and engineering by taking the combined Bachelor of Science and Engineering course. By a careful selection of electives both degrees may be secured in five years.

Metallurgy Option. Students electing the metallurgy option in chemical engineering should take 5 hours of shop in summer school and the following courses as their fourth year electives: Ch.E. 211 (3 hrs.) Ch.E. 232 (2 hrs.), Ch.E. 222 (2 hrs..), and Ch.E. 223 (2 hrs.). Ch.E. 124 (2-5 hrs.) may be offered in place of one of the above courses by students who have shown marked ability along metallurgical lines.

Ceramic Option. Students electing the ceramic option in chemical engineering should substitute Ch.E. 211 (3 hrs.) for C.E. 115 (3 hrs.) and Ch.E. 230 (3 hrs.) for Ch.E. 201 (3 hrs.). In addition, they should take Ch.E. 231 (2 hrs.), Ch.E. 232 (2 hrs.) and Ch. E. 233 (2 hrs.) as their senior electives, but students showing marked ability in ceramics may offer Ch.E. 124 (2-5 hrs.) in place of either of these three courses.

CURRICULUM IN CHEMICAL ENGINEERING

Leading to the Degree of Bachelor of Science in Chemical Engineering

FIRST YEAR: See curriculum on page 175

Summer Session Following First Year

	Hrs.
M. E. 6—Foundry* 1 hr. / M. E. 7—Welding and Heat Treat.* 1 hr.	or Chem. 105S—Qual. Anal. 2
M. E. 10—Pipefitting	1
M. E. 11—Machine Work	2
	5

Second Year

First Semester	Hrs.	*Second Semester*	Hrs.
Phys. 105—G. Physics	4	Phys. 106—G. Physics	4
Phys. 107—G. Physics Lab.	1	Phys. 108—G. Physics Lab.	1
Math. 107—Calculus	4	Math. 108—Calculus	4
Mil. 3—Military Science	2	Mil. 4—Military Science	2
Chem. 15—Quant. Analysis	3	Chem. 107—Quant. Analysis	2
Pub. Spk. 13—Effective Speaking	2	E. M. 106—Mineralogy	1
Econ. 103—Prin. of Economics	3	M. 101—Statics	3
	—	Ch. E. 109—Ch. E. Economics	2
	19		—
			19

Third Year

Chem. 233—Organic Chem.	5	Ch. E. 201—Unit Organic Processes	3
Chem. 260—Physical Chem.	3	Chem. 261—Physical Chem.	3
Ch. E. 205—Elements of Ch. E.	3	Ch. E. 105—Chem. Eng'g. Design	2
Ch. E. 206—Eng'g. Chem. Lab.	1	M. E. 27—Mechanism	2
E. M. 202—Coal Lab.	1	M. E. 220—Heat and Pow. Eng'g.	3
M. 102—Mech. of Materials	4	M. 104—Kinetics	3
M. 103—Materials Test. Lab.	1	C. E. 115—Fluid Mechanics	3
G. 101—Engineering Society	½	G. 102—Engineering Society	½
	18½		19½

Fourth Year

Ch. E. 204—Chem. Eng'g. Calc.	2	Ch. E. 203—Ch. E. Thermodynamics	2
Ch. E. 208—Chem. Eng'g. Lab.	2	Ch. E. 207—Prin. Chem. Eng'g.	3
Ch. E. 214—Inorganic Chem. Techn.	2	Ch. E. 210—Electrochem. Ind.	3
Ch. E. 220—Metallurgy	2	Ch. E. 215—Organic Chem. Techn.	2
Ch. E. 221—Metallurgy Lab.	1	Ch. E. 216—Chem. Eng'g. Design	2
E. E. 110—Elements of E. E.	5	Ch. E. 217—Heat Trans. & Evap.	2
G. 103—Engineering Society	½	G. 104—Engineering Society	½
Electives—(see below)	3	Electives—(see below)	3
		Inspection Trip	
	17½		17½

Electives

Ch. E. 124—Thesis	2 to 5	Ch. E. 223—Metallography	2
Ch. E. 202—Water Exam. & Purif.	2	Ch. E. 232—Refractories	2
Ch. E. 211—Fuels and Combust.	2 or 3	M. E. 205—Industrial Eng'g.	3
Ch. E. 218—Adv. Chem. Eng'g. Design	2	G. 110—Business Law	3
Ch. E. 222—Non-Ferrous Metallurgy	2	Bus. 110—Prin. of Accounting	2
		Geol. 1—G. Geology	3
		German 1 and 2	6
		Mil. 105-108—Adv. Military	1 to 4

*Recommended for students taking metallurgy option.

CIVIL ENGINEERING

The course in civil engineering has been planned to give a broad education in those general and scientific subjects which form the foundation of all engineering, and a special training in the field of civil engineering.

Civil engineering includes plane, topographic, and geodetic surveying, these branches having to do with measurements of land surfaces; highway and railway engineering, which have to do with the building and maintenance of highways and railways, respectively, as well as the construction of tunnels, subways, and other special engineering projects; sanitary and municipal engineering, comprising the construction and operation of sewers, sewerage purification works, water supply systems, water purification plants, and garbage disposal systems; structural engineering, comprising the construction of bridges, buildings, foundations, walls, piers, and other fixed structures; and hydraulic engineering, comprising the development of water power, the building of dams, river improvements, and irrigation works.

During the first two years emphasis is placed on those subjects underlying all engineering, such as English, mathematics, chemistry, physics, drawing, and surveying. These subjects are taught not as an end in themselves, but rather as a tool for the solution of engineering problems. The teaching is done by means of recitations, drawing room work, laboratory work, and field work. During these first two years instruction is also given in military training and in physical education, in order to keep the student physically fit.

In the third and fourth years the application of these basic sciences is made to the solution of engineering problems. Breadth of training is furnished by courses in mechanics, economics, bacteriology, geology, electricity, and heat engineering. Depth of training is furnished by professional work in highway, railway, sanitary, structural, and hydraulic engineering.

The professional field is so wide that the whole cannot be covered in a four-year course. For this reason, during the latter part of the course certain options are offered. In addition to the sanitary option, outlined below, the student is offered a choice of one of two options in the fourth year, one of which devotes more time to the subject of highway engineering, and the other to the subject of hydraulic engineering.

OPTIONAL COURSES IN SANITARY ENGINEERING

Students in civil engineering who desire to specialize in sanitary engineering are required to make the following substitutions:

Fourth year—first semester, C.E. 202 (3 hrs.) for C.E. 103 (3 hrs.) and C.E. 117 for 2 hrs. of elective subjects; second semester, C.E. 203 (3 hrs.) for C.E. 204 (3 hrs.) and Ch.E. 202 for 2 hours elective.

CURRICULUM IN CIVIL ENGINEERING

Leading to the Degree of Bachelor of Science in Civil Engineering

FIRST YEAR: See curriculum on page 175

Second Year

First Semester	*Hrs.*	*Second Semester*	*Hrs.*
Physics 105—G. Physics	4	Physics 106—G. Physics	4
Physics 107—G. Physics Lab.	1	Physics 108—G. Physics Lab.	1
Math. 107—Calculus	4	Math. 108—Calculus	4
Chem. 10—Quant. Analysis	2	Mil. 4—Military Science	2
Mil. 3—Military Science	2	C. E. 3—Railroad Curves	2
C. E. 2—Surveying	4	M. 101—Statics	3
Pub. Spk. 13—Effective Speaking	2	Geol. 1—G. Geology	3
	19		19
C. E. 4S—Summer Surveying (five weeks)	5		

Third Year

Econ. 103—Econ. and Acct.	3	Bus. 110—Prin. of Acct.	2
M. 102—Mech. of Materials	4	C. E. 121—Structural Eng'g.	4
M. 103—Materials Test. Lab.	1	C. E. 115—Fluid Mechanics	3
C. E. 10—Struct. Drafting	2	C. E. 101—Elements of Hwy. Eng'g.	3
M. E. 220—Heat & Pow. Eng'g.	3	M. 104—Kinetics	3
E. E. 110—Elements of E. E.	5	Bact. 141—Bacteriology	3
G. 101—Engineering Society	½	G. 102—Engineering Society	½
		Geol. 1—Geol. Lab.	1
	18½		19½

Fourth Year

C. E. 123—Bridge Design	3	C. E. 102—Railway Eng'g.	3
C. E. 207—Foundations	3	C. E. 204—Advanced Structs.	3
C. E. 103—Highway Design	3	C. E. 206—Concrete Constr.	3
C. E. 116—Water Supply Eng'g.	4	G. 110—Business Law	3
C. E. 120—Materials of Constr.	2	C. E. 118—Sanitary Eng'g.	3
G. 103—Engineering Society	½	G. 104—Engineering Society	½
Electives—(see below)	2	Inspection Trip	
		Electives—(see below)	2
	17½		17½

Electives

C. E. 200—Water Power Eng'g.	2	C. E. 209—Highway Lab.	2
Ch. E. 202—Water Ex.	2	C. E. 124—Thesis	2 or 4
C. E. 208—Trans. Econ.	2	Mil. 105-108—Adv. Military	1 to 4

ELECTRICAL ENGINEERING

The course in electrical engineering has for its objective a general training in engineering fundamentals together with special instruction in those theoretical and practical subjects which will give the student a basic knowledge of the application of electricity.

The work of the first two years is largely preparatory for the technical training of the last two years and parallels closely that of other engineering courses. This gives the requisite foundation in English, mathematics, physics, chemistry, economics, drafting, and the elements of shop practice, as well as instruction in the elements of electrical engineering, which is begun as soon as the preparation in physics will allow.

The studies of the third year are primarily those of electrical engineering supplemented with courses of a general engineering nature which cannot be given earlier because of the preparation required. In the classroom the theory, characteristics, and applications of electrical devices are presented and by means of experiments and problems in the laboratory and drafting room the student acquires a working knowledge of the facts and principles involved. This covers fundamental instruction in direct-current machines, electronics, alternating-current theory, and machines.

The fourth year is a continuation of more advanced subjects in electrical engineering together with some of the general engineering subjects. Since the study of electrical circuits and net works requires the application of differential equations, a course in elementary differential equations and their use in the solution of electric-circuit problems, together with other mathematical methods of solution, is given in the first semester of the fourth year. The economic principles involved in the selection and design of electrical equipment and the utilization of electrical energy are taken up in the course in engineering economics the last semester of the fourth year. This course together with that of business law prepares the student for administrative work in the electrical engineering field. An introductory course in illumination is intended to acquaint the student with the fundamentals of illuminating engineering.

In the fourth year the student has a choice of six hours of electives. By properly grouping these electives he may specialize in different fields of electrical engineering, such as electrical transmission, electrical power generation, electrical communication or radio, or he may select those courses of particular value or interest to him. These electives are listed on the opposite page below the schedule of courses.

CURRICULUM IN ELECTRICAL ENGINEERING

Leading to the Degree of Bachelor of Science in Electrical Engineering

FIRST YEAR: See curriculum on page 175

Summer Session Following First Year

	Hrs.
M. E. 11—Machine Shop	2
M. E. 7—Welding and Heat Treatment	1
M. E. 6—Foundry	1
E. E. 2—Elem. Elect. Lab.	1
	5

Second Year

First Semester	Hrs.	*Second Semester*	Hrs.
Phys. 105—G. Physics	4	Phys. 106—G. Physics	4
Phys. 107—G. Physics Lab.	1	Phys. 108—G. Physics Lab.	1
Math. 107—Calculus	4	Math. 108—Calculus	4
Mil. 3—Military Science	2	Mil. 4—Military Science	2
Econ. 103—Prin. of Economics	3	E. E. 100—Elements of Elect. Eng'g.	3
Pub. Spk. 11—Effective Speaking	3	M. 101—Statics	3
M. E. 24—Empirical Design	2	M. E. 27—Mechanism	2
	19		19

Third Year

M. 103—Materials Test. Lab.	1	M. 104—Kinetics	3
M. E. 122—Mechanical Lab.	2	E. E. 106—Electronics	4
M. E. 221—Thermodynamics	3	M. E. 222—Heat Engines	3
E. E. 200—D. C. Machinery	4	E. E. 202—A. C. Machinery	3
E. E. 201—A. C. Theory	4	E. E. 204—Elect. Calc. & Desn.	3
G. 101—Engineering Society	½	E. E. 205—Electrical Lab.	2
M. 102—Strength of Materials	4	G. 102—Engineering Society	½
	18½		18½

Fourth Year

E. E. 104—Illumination	2	G. 110—Business Law	3
E. E. 203—A. C. Machinery	3	C. E. 115—Fluid Mechanics	3
E. E. 206—Electrical Lab.	2	E. E. 220—Eng'g. Economics	3
E. E. 207—Elect. Transmission	3	E. E. 221—Elect. Communication	3
E. E. 208—Elect. Control	2	E. E. 222—Adv. Electrical Lab.	2
E. E. 219—Diff. Eq. & Elect. Circuit	3	G. 104—Engineering Society	½
G. 103—Engineering Society	½	Inspection Trip	
Electives—(see below)	3	Electives—(see below)	3
	18½		17½

Electives

E. E. 124—Thesis	2 to 5	E. E. 218—Electron Tubes in Ind.	3
E. E. 209—Electric Traction	2	Ch. E. 210—Elect. Chem. Ind.	2 or 3
E. E. 211—Electric Problems	1 to 3	Phys. 124—Radio-Telegra. & Tele.	3
E. E. 213—Elect. Power Trans. and Distribution	3	M. E. 223—Steam Power Plants	3
E. E. 214—Ind. Appl. of Elec.	3	M. E. 228—Engineering Lab.	2
E. E. 216—Telephone Eng'g.	3	Mil. 105-108—Adv. Military	1 to 4
E. E. 217—Symmetrical Comp.	3		

MECHANICAL ENGINEERING

The aim of the course in mechanical engineering is to give the student such mental equipment as will enable him to deal most effectively both technically and commercially with general engineering problems. All possible practice is given in the work that an engineer is ordinarily called on to do, but greater stress is laid on a thorough knowledge of those underlying principles and methods which are the foundation of all engineering professions. To this is added a study of those economic subjects which are essential to a thorough understanding of sound business methods. Electives are provided in the fourth year which enable the student to specialize in accordance with his natural inclination. Students selecting electives in the power field, in the industrial field, or in the areonautical field in the first semester are required to take at least 3 hours in the same group during the second semester. In the fourth year those students interested in the aeronautical field apply these principles of design to airplane structures, while those interested in the industrial field study the problems of organization and management of industries.

The work in pure mathematics is terminated at the end of the second year, and applications follow in the recitation room courses in mechanism, statics, mechanics of materials, dynamics, and machine design. Power engineering begins with the course in thermodynamics in the third year and is continued by the courses in heat engines, internal combustion engines, and power plant design, with electives in the design of steam turbines and in gas engineering. A sufficient amount of electrical engineering is given in the third and fourth years to enable the student to handle engineering operations involving the simplest electrical problems, and additional courses are available as electives.

Fundamental drafting-room procedure is taught in the first year and this is supplemented by shop work, beginning in the summer following the first year. This is planned to give a knowledge of the fundamental tools and of methods of production. These together provide the practical basis necessary to the proper solution of the problems in mechanism, machine design, and power-plant design which are presented during the second, third, and fourth years.

The engineering laboratories provide the student with practice in testing, handling, and caring for a large variety of machinery, including steam, air, gas, hydraulic, material-testing, internal combustion, and power-transmission machinery. One half-day a week is devoted to this work during the last two years.

Students desiring to take full advantage of the aeronautical option may substitute M.E. 233, Aerodynamics, for M.E. 223, Steam Power Plants, and M.E. 124, Thesis, for M.E. 227, Power Plant Design.

CURRICULUM IN MECHANICAL ENGINEERING

Leading to the Degree of Bachelor of Science in Mechanical Engineering

FIRST YEAR: See curriculum on page 175

Summer Session Following First Year

	Hrs.
M. E. 6—Foundry	1
M. E. 7—Welding and Heat Treatment	1
M. E. 13S—Machine Work	3
	5

Second Year

First Semester	Hrs.	*Second Semester*	Hrs.
Physics 105—G. Physics	4	Physics 106—G. Physics	4
Physics 107—G. Physics Lab.	1	Physics 108—G. Physics Lab.	1
Math. 107—Calculus	4	Math. 108—Calculus	4
Mil. 3—Military Science	2	Mil. 4—Military Science	2
Chem. 10—Quant. Analysis	2	M. 101—Statics	3
M. E. 29—Mechanism	4	M. E. 24—Empirical Design	2
M. E. 4—Pattern Making	2	Pub. Spk. 11—Effective Speaking	3
	19		19

Third Year

Econ. 103—Econ. and Acct.	3	Bus. 110—Prin. of Acct.	2
M. 102—Mech. of Materials	4	M. 104—Kinetics	3
M. 103—Materials Test. Lab.	1	E. E. 103—Elements of E. E.	4
E. E. 102—Elements of E. E.	4	M. E. 113—Machine Design	4
M. E. 122—Mechanical Lab.	2	M. E. 105—Machine Constr.	2
M. E. 221—Thermodynamics	3	M. E. 222—Heat Engines	3
G. 101—Engineering Society	½	G. 102—Engineering Society	½
	17½		18½

Fourth Year

C. E. 115—Fluid Mechanics	3	G. 110—Business Law	3
C. E. 122—Structural Eng'g. or		E. E. 214—Ind. App. of Elec.	3
Ch. E. 220—Metallurgy	2	M. E. 227—Pow. Plant Design	2
Ch. E. 221—Metallurgy Lab.	1	M. E. 228—Eng'g. Lab.	2
M. E. 123—Eng'g. Lab.	2	M. E. 229—Int. Comb. Engines	2
M. E. 203—Machine Design	4	G. 104—Engineering Society	½
M. E. 223—Steam Pow. Plants	3	Inspection Trip	
G. 103—Engineering Society	½	Electives—(see below)	6
Electives—(see below)	3		18½
	18½		

Electives

M. E. 106—Shop Methods	2 or 3	M. E. 231—Airplane Structures	3
M. E. 124—Thesis	2 to 4	M. E. 232—Airplane Design	3
M. E. 205—Industrial Eng'g.	3	M. E. 233—Aerodynamics	3
M. E. 206—Industrial Eng'g.	3	Mil. 105-108—Adv. Military for Engineers	1 to 4
M. E. 224—Steam Turbines	3	E. E. 204—E. Desn. and Calc.	3
M. E. 225—Gas Eng'g.	3	Ch. E. 211—Fuels and Combustion	2 or 3
M. E. 230—Airplane Structures	3		

FIVE-YEAR CURRICULA

For a description of curricula leading to the degree of Bachelor of Science and degrees in engineering, see page 175.

THE SCHOOL OF MINES CURRICULA[1]

1. A four-year curriculum leading to the degrees of Bachelor of Science in Engineering of Mines, with options in coal mining and oil and gas engineering.

2. Combined science and engineering curricula extending over five or more years leading to the degrees of Bachelor of Science and Bachelor of Science in Mining Engineering in the School of Mines.

MINING ENGINEERING

Mining engineering deals with the processes and appliances used in the extraction of minerals from within the earth and their utilization. Not only must the mining engineer be thoroughly trained in mining and geology, but also in the application of the fundamental principles of civil, electrical, and mechanical engineering to mining conditions.

The first two years of the course in mining engineering are devoted to a thorough training in the underlying principles of mathematics, physics, and chemistry. Supplementing these are courses in surveying, including mine surveying, English, and drawing. For the last two years of the course two options are provided, one in coal mining and one in geological, oil, and gas engineering. The student is permitted to state his choice of option at the beginning of the third year.

COAL MINING

In the Coal Mining Option the study of coal mining is taken up in the third year. This study includes the geology and classification of coals; explosives and blasting; prospecting; shaft sinking and tunneling; methods of working; haulage, hoisting and pumping; and the preparation of coal for the market. A course in the projection of mine workings and the design of mining plants is offered throughout the fourth year. A thorough course in mine gases and the ventilation of mines is given in the first half of the fourth year, supplemented by work in the mining laboratory. The course in fuels is designed to give the student a knowledge of the various fuels that are utilized in engineering practice, while the courses in metallurgy acquaint him with the minerals and processes used in manufacture of iron and steel. The course in mine management presents the economic, social, and financial considerations to be met in the successful management of a mining enterprise.

The study of steam engineering begins with the course in heat and power engineering.

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[1] The freshman year of these curricula is common with the freshman year in the College of Engineering. This provision permits a student to postpone a choice of his course of study in any branch of engineering until after a year of college work.

Practice in the handling and care of instruments and machinery and in the solution of practical engineering problems is offered in the mechanical laboratory. These courses are followed by courses in electrical engineering and structural engineering.

Training in the science of geology is offered by the course in mineralogy and general geology. These courses may be supplemented by the study of the economic geology of the non-metallic minerals in the fourth year, special attention being paid to the geology of coal, oil and gas. Should the student desire further work in geology a course in field geology is offered as an elective subject.

The courses in economics, business law, and industrial engineering furnish the fundamental business training so essential for the engineer.

CURRICULUM IN MINING ENGINEERING

(Coal-Mining Option)

Leading to the Degree of Bachelor of Science in Engineering of Mines

FIRST YEAR: See curriculum on page 175

Second Year

First Semester	*Hrs.*	*Second Semester*	*Hrs.*
Physics 105—G. Physics	4	Physics 106—G. Physics	4
Physics 107—G. Physics Lab.	1	Physics 108—G. Physics Lab.	1
Math. 107—Calculus	4	Math. 108—Calculus	4
Mil. 3—Military Science	2	Mil. 4—Military Science	2
E. M. 100—Mine Surveying	2	Chem. 6—Quant. Analysis	3
E. M. 106—Mineralogy	2	E. M. 101—Mine Surveying	2
Geol. 1—General Geology	4	M. 101—Statics	3
	19		19

E. M. 102S—Summer Mine Surveying (five weeks) 5

Third Year

Econ. 103—Econ. and Acct.	3	G. 110—Business Law	3
C. E. 10—Structural Drafting	2	Bus. 110—Prin. of Acct.	2
M. 102—Mech. of Materials	4	Pub. Spk. 13—Effective Speaking	2
M. 103—Materials Test. Lab.	1	E. M. 202—Coal Lab.	1
E. M. 111—Mining	2	E. M. 212—Coal Mining	4
E. M. 107—Mining Methods	4	C. E. 115—Fluid Mechanics	3
Ch. E. 220—Metallurgy	2	M. E. 220—Heat and Pow. Eng'g.	3
G. 101—Engineering Society	½	G. 102—Engineering Society	½
	18½		18½

Fourth Year

E. E. 102—Elements of E. E.	4	E. E. 103—Elements of E. E.	4
C. E. 122—Structural Eng'g.	3	E. M. 114—Mine Management	2
E. M. 115—Mine Design	2	E. M. 116—Mine Design	3
E. M. 213—Mine Ventilation	3	E. M. 118—Coal Preparation	3
M. 104—Kinetics	3	E. M. 119—Mine Equip. & Mach.	2
G. 103—Engineering Society	½	G. 104—Engineering Society	½
Electives—(see below)	3	Inspection Trip	
		Electives—(see below)	3
	18½		17½

Electives in the Coal-Mining Option

E. M. 117—Indus. Safety Eng'g. -- 3
E. M. 120—Thesis ---------- 2 to 4
E. M. 203—Geol. Survey -------- 2
Ch. E. 211—Fuels ---------- 3
Ch. E. 222—Non. Fer. Met. ------ 2
E. E. 214—Industrial Applications of Electricity ---------- 3
C. E. 206—Concrete Const. ------ 3
M. E. 207—Industrial Eng'g ------ 3
Geol. 111—Economic Geol. --- 3 or 4
Geol. 3—Historical Geol. ---- 3 or 4
Geol. 108—Natural Resources and Geology of West Va. ------ 2 or 3
Mil. 105-108—Adv. Military -- 1 to 4

GEOLOGICAL AND OIL AND GAS ENGINEERING

This option is planned to meet the needs of the engineer who is more interested in the geological aspect of mining than in the actual operation of a mining property. There is a growing demand for the so-called mining geologist who, while he has had a thorough training in the fundamentals of engineering in general and of mining engineering in particular, yet is specially qualified to work out the detailed geological features of mining properties and to make reports on them. This is particularly true in the case of oil and gas companies, where accurate geological knowledge in advance of actual drilling operations is of the greatest importance in the economical development of the field. Besides the opportunities offered by mining companies, many of our railroads maintain a corps of geologists while the several state and the Federal Government are continually carrying on geological investigations. This course also offers an excellent preparation for those who purpose to do graduate work.

In the third year the course differs from the coal mining option in that organic chemistry and geological courses are substituted for the courses in coal mining. A course in field geology in which the student prepares a geological map and a complete report on an assigned area enables him to apply the geological knowledge received in various courses. The fundamentals of mining and metallurgy are studied in the third year as well. The study of oil and gas geology treats of the origin, properties, distribution, and mode of accumulation of oil and gas, and familiarizes the student with all the available sources of information on this subject. The courses in oil and gas production and oil refining deal with the subjects of the chemical and physical properties of petroleum and natural gas, their extraction and subsequent treatment, the valuation of oil and gas properties, reports on them, and the actual testing in the laboratory of various oils, oil shales, and natural gas. The problems of natural gas measurement are stressed.

A thorough grounding in the fundamentals of business is afforded by the courses in economics, accounting, business law, and industrial engineering.

CURRICULUM IN MINING ENGINEERING

(Oil and Gas Option)

Leading to the Degree of Bachelor of Science in Engineering of Mines

FIRST YEAR: See curriculum on page 175

Second Year

First Semester	*Hrs.*	*Second Semester*	*Hrs*
Physics 105—G. Physics	4	Physics 106—G. Physics	4
Physics 107—G. Physics Lab.	1	Physics 108—G. Physics Lab.	1
Math. 107—Calculus	4	Math. 108—Calculus	4
Mil. 3—Military Science	2	Mil. 4—Military Science	2
E. M. 100—Mine Surveying	2	Chem. 6—Quant. Analysis	3
E. M. 106—Mineralogy	2	E. M. 101—Mine Surveying	2
Geol. 1—General Geol	4	M. 101—Statics	3
	19		19
E. M. 102S—Summer Mine Surveying (five weeks)	5		

Third Year

Chem. 233—Organic Chem.	5	M. E. 220—Heat and Pow. Eng'g.	3
Geol. 3—Historical Geol.	4	M. 104—Kinetics	3
M. 102—Mech. of Materials	4	Pub. Spk. 13—Effective Speaking	2
M. 103—Materials Test. Lab.	1	Geol. 161—Field Geol.	3
Ch. E. 220—Metallurgy	2	Ch. E. 101—Oil Lab.	1
E. M. 201—Oil Field Development	2	C. E. 115—Fluid Mechanics	3
G. 101—Engineering Society	½	G. 110—Business Law	3
		G. 102—Engineering Society	½
	18½		18½

Fourth Year

Econ. 103—Econ. and Accounting	3	Bus. 110—Prin. of Accounting	2
Ch. E. 211—Fuels	3	Geol. 211—Econ. Geol. of Coal, Oil and Gas	3
Ch. E. 212—Oil Refining	2	E. M. 203—Geol. Surveying	2
Geol. 205—Structural Geol.	3	E. M. 204—Oil & Gas Prod.	4
E. E. 110—Elements of E. E.	5	E. M. 205—Gas Meas. Eng'g.	2
G. 103—Engineering Society	½	G. 104—Engineering Society	½
Electives—(see below)	2	Inspection Trip	
		Electives—(see below)	4
	18½		17½

Electives in the Oil and Gas Option

E. M. 117—Indus. Safety Eng'g.	3	C. E. 206—Concrete Const.	3
E. M. 212—Coal Mining	4	M. E. 207—Industrial Eng'g	3
E. M. 120—Thesis	2 to 4	Geol. 111—Economic Geology (Non-Metallic)	3
Geol. 108—Natural Resources and Geology of West Virginia	2 or 3	Chem. 238, 260	3 to 5
Mil. 105-108—Adv. Military	1 to 4	M. E. 229—Int. Comb. Engines	2

FIVE-YEAR CURRICULA

Leading to the Degree of Bachelor of Science and Degrees in Engineering and in Mining Engineering

These curricula are designed to meet the needs of students who wish a broader training in liberal-arts subjects than is provided in a four-year curriculum. The work outlined for the first four years may also be taken by students who desire a general scientific course with engineering as a major as a preparation for the study of law, business, business administration, or some branch of science or for teaching mathematics and science.

(A) Requirements for the degree of Bachelor of Science, to be conferred at the end of the fourth year.

Subject	*Hours*
The requirements in the first three years of any four-year engineering curriculum[1]	115 to 117
Additional economics (group requirements of 6 hours)[1]	1
One foreign language	12
Elective from one of the following groups: (1) English, journalism, public speaking; (2) foreign language (3) history; (4) political science; (5) philosophy and sociology; (6) business administration.	6
Total	134 to 136

(B) Requirements for the Bachelor of Science degree in Engineering or Engineering of Mines to be conferred upon completion of the fifth year.

The work outlined for the fourth year in the department in which the first degree was taken	37 to 35
Total for five years	171

SPECIAL ENGINEERING CURRICULA

1. Elective Groups for Students in Other Colleges. Candidates for degrees other than engineering degrees and special students in any department of the University are permitted to elect subjects in the College of Engineering and the School of Mines, provided, in each case, they have had the subjects specified as prerequisites. Students who wish to take a general classical or scientific course of study before taking the engineering curriculum are advised to carry their mathematics as far as called for by the engineering curriculum, and to take some of their elective work in the College of Engineering.

For a list of engineering and mining courses accredited in the College of Arts and Sciences see the footnote on page 109.

2. Partial Curriculum. Students who have not the time or are otherwise unable to take full curriculum will be allowed to take a special or partial

[1]Candidates for the degree of Bachelor of Science in Chemical Engineering or Bachelor of Science in Electrical Engineering may postpone 3 hours of third year work until the fifth year to make room for the economics required for the degree of Bachelor of Science.

In special cases students may, with the approval of the adviser and Committee on Scholarship, be permitted to substitute a limited amount of fourth-year work in the same curriculum for third-year subjects.

curriculum, consisting of such studies as they are prepared to take, provided such curriculum shall have been approved by the adviser. For further information see statement of requirements for admission as special students.

PROFESSIONAL DEGREES

The University confers the following professional degrees: Chemical Engineer (Ch. E.), Civil Engineer (C. E.), Electrical Engineer (E. E.), Mechanical Engineer (M. E.), and Engineer of Mines (E. M.), upon graduates of the College of Engineering and of the School of Mines of West Virginia University on the basis of practical experience and study in absentia, the presentation of a thesis, and oral final examination.

To be eligible a candidate for a professional degree must have been in active practice of his profession for at least five years since receiving his first degree, and must have been in responsible charge of important work for at least two years.

Application for registration as a candidate for a degree should be made not later than October 1 in the year in which the degree is expected. Detailed regulations and registration blanks may be obtained from the Dean of the College of Engineering or the Director of the School of Mines.

COURSES IN THE COLLEGE OF ENGINEERING

(For explanation of abbreviations see page 81)

NOTE—Courses marked by an asterisk (*) may be taken as undergraduate work by students in colleges other than the College of Engineering.

CHEMICAL, METALLURGICAL, AND CERAMIC ENGINEERING

Professors HODGE and KOEHLER; Assistant Professors BROWN and SIMONS

Undergraduate Division

101.* Oil Laboratory. I. 1 Hr. Primarily for students taking the Oil and Gas Option. PR: Chemistry 6 or 107. Mr. Koehler

102. Blow-Pipe Analysis and Assaying. II. 2 Hrs. Laboratory and recitations. PR: Chemistry 6 or 107. Mr. Brown

105. Chemical Engineering Design. II. 2 Hrs. PR: M. E. 20 and Ch. E. 205. Mr. Simons

109. Chemical Engineering Economics. II. 2 Hrs. The economic principles applied to layout, location, design, and operation of plants devoted to the production of industrial chemicals. PR: Econ. 103 and Chemistry 15. Mr. Koehler

110S. Practical Pottery. S1, S2. 2 Hrs. Fundamentals of clay working. Mr. Koehler and Assistant

124. Thesis. I, II, 2 to 5 Hrs. Some problem in chemical engineering or industrial chemistry is selected for investigation. A carefully prepared report is required. Credit is given in proportion to time put in and results obtained. Open only to qualified seniors. Staff

201. Unit Organic Processes. II. 3 Hrs. Unit processes involved in the manufacture of commercial products from organic raw materials, petroleum, benzene and related compounds; intermediates, dyes, drugs, and explosives. PR: Chemistry 233 and Ch. E. 205. Mr. Simons

202.* Water Examination and Purification. II. 2 Hrs. PR: Chemistry 10 or 107. Mr. Hodge

203. **Chemical Engineering Thermodynamics.** II. 2 Hrs. PR: Ch. E. 204 and 208. Mr. Koehler and Mr. Simons

204. **Chemical Engineering Calculations.** II. 2 Hrs. Industrial stoichiometry; calculations involved in the unit operations and processes of the chemical engineering industries. PR: Chemistry 261 and M. E. 220. Mr. Koehler and Mr. Simons

205.* **Elements of Chemical Engineering.** I. 3 Hrs. PR: or concurrent: Chemistry 260 and M. 103. Mr. Hodge and Mr. Simons

206.* **Engineering Chemistry Laboratory.** I. 1 Hr. Technological tests and analyses of boiler waters, cements and paints. PR: Chemistry 107. Mr. Simons

207. **Principles of Chemical Engineering.** II. 3 Hrs. Continuation of Ch. E. 205; also PR: Ch. E. 204. Mr. Hodge

208. **Chemical Engineering Laboratory.** I. 2 Hrs. Unit operations of the chemical engineering industries. PR: Ch. E. 205, C. E. 115. Mr. Koehler and Mr. Simons

210.* **Electrochemical Industries.** I, II. 2 or 3 Hrs. PR: Chemistry 4, and PR: or concurrent: E. E. 110 or Chemistry 260. Mr. Koehler

211. **Fuels.** I. 2 or 3 Hrs. PR: Chemistry 6 or 107 and M. E. 122 or M. E. 220. Mr. Brown

212. **Oil-Refining Laboratory.** I. 2 Hrs. PR: Chemistry 233 and M. 103. Mr. Simons

213. **Principles of Gas and Fuel Engineering.** II. 2 or 3 Hrs. PR: Ch. E. 211. Mr. Brown

214. **Inorganic Chemical Technology.** I. 2 Hrs. PR: Ch. E. 205 and M. E. 220. Mr. Simons

215. **Organic Chemical Technology.** II. 2 Hrs. PR: Ch. E. 201 and Ch. E. 205. Mr. Simons

216. **Chemical Engineering Design.** II. 2 Hrs. PR: Ch. E. 105 and Ch. E. 208. Mr. Simons

217. **Heat Transfer and Evaporation.** II. 2 Hrs. PR: Ch. E. 105, Ch. E. 208, and M. E. 220. Mr. Simons

218. **Advanced Chemical Engineering Design.** II. 2 Hrs. PR: Ch. E. 216 and 217. Mr. Simons

220.* **Metallurgy of Iron and Steel.** I. 2 Hrs. PR: Chem. 6, 10 or 107 and M. 103. Mr. Brown

221.* **Metallurgy Laboratory.** I. 1 Hr. Preparation and microscopical examination of 25 specimens of iron and steel; analytical determinations; photomicrographs; to accompany Ch. E. 220. Mr. Brown

222. **Metallurgy, Non-Ferrous.** II. 2 Hrs. PR: Chemistry 6, 10 or 15 and M. 103. Mr. Brown

223. **Metallography.** II. 2 Hrs. Phase-rule diagrams of alloy systems. Photomicrographs of metals and alloys. PR: Ch. E. 220, 221 and 222, and Chemistry 260. Mr. Brown

230. **Ceramics.** II. 3 Hrs. A review of the ceramic industries. Chemical and engineering principles applied in the manufacture of ceramic materials. PR: Chemistry 6 or 107. Mr. Koehler

231. **Advanced Ceramics Laboratory.** I. 2 Hrs. Preparation of bodies, glazes, enamels, and glass. Biscuit and glost firing. Coloring agents. Factory control tests. PR: Ch. E. 230. Mr. Koehler

232. **Refractories.** I, II. 2 Hrs. Manufacture, properties, and use of refactory materials. Standard tests. Study of phase diagrams of refactory materials. PR: Chemistry 6 or 107 and Chemistry 260. Mr. Koehler

233. **Glass.** I, II. 2 Hrs. Physical and chemical properties of glass. Methods of analysis of glass and of raw materials. Theory and practice of manufacture. PR: or concurrent, Chemistry 260. Mr. Koehler

235s. **Practical Pottery.** SI. 2 Hrs. A continuation of 110 S. Mr. Koehler and Assistant

236s. **Pottery and Ceramic Art.** S2. 2 Hrs. Mr. Koehler and Assistant

Graduate Division

300. **Seminar.** SI. I. II. 1 to 6 Hrs. Hours to be arranged. Staff

351. **Coal Tar and By-Products.** II. 2 Hrs. PR: Ch. E. 201, 206 and 211 Mr. Simons

352. **Biochemical Industries.** I. 3 Hrs. PR: Ch. E. 201 and 207. Mr. Simons

353. **Transformation in Silicates.** I, II. 2 Hrs. PR: Ch. E. 230. Mr. Koehler

354. **Advanced Fuel Engineering.** I. 3 Hrs. PR: Ch. E. 213. Mr. Koehler

355. **Advanced Organic Technology.** I. 3 Hrs. PR: Chem. 233 and either Chem. 238 or Ch. E. 201. Mr. Simons

356. **Advanced Organic Technology.** II. 2 Hrs. PR: Ch. E. 355. Mr. Simons

397, 398. **Research.** I, II. Credit to be arranged. A suitable problem in chemical engineering, metallurgy, or ceramics is selected for investigation, PR: Ch. E. 207. Mr. Koehler and Staff

CIVIL ENGINEERING

Professors DAVIS and DOWNS; Associate Professor SPEIDEN; Assistant Professor BAKER; and Instructor THEIBERT

Undergraduate Division

1.* **Surveying** I, II. 2 Hrs. Elementary surveying and spherical trigonometry. Primarily for freshmen. PR: Math. 4. Mr. Baker

2.* **Surveying.** I. 4 Hrs. PR: C. E. 1 and Math. 4. Mr. Baker

3.* **Railroad Curves.** II. 2 Hrs. Continuation of C. E. 2. Mr. Baker

4S. **Summer Surveying.** S1 (5 Weeks). 5 Hrs. PR: C. E. 3. Mr. Baker

5. **Land Surveying.** I. 4 Hrs. Primarily for forestry students. PR: Math. 10. Mr. Baker

6. **Topographic Mapping.** II. 2 Hrs. Primarily for forestry students. PR: C. E. 5. Mr. Baker

10.* **Structural Drafting.** I. 2 Hrs. PR: M. E. 20. Mr. Speiden

101. **Elements of Highway Engineering.** II. 3 Hrs. PR: C. E. 4S. Mr. Downs

102. **Railway Engineering.** II. 3 Hrs. PR: C. E. 4S. Mr. Downs

103. **Highway Design.** I. 3 Hrs. PR: C. E. 101. Mr. Downs

115.* **Fluid Mechanics.** I, II. 3 Hrs. PR: M. 102 or 104 (or registration in M. 102 or 104). Mr. Speiden

116. **Water Supply Engineering.** I. 4 Hrs. PR: C. E. 115. Mr. Speiden

117. **Municipal Engineering.** I. 2 Hrs. PR: C. E. 115. Mr. Speiden

118. **Sanitary Engineering.** II. 3 Hrs. PR: C. E. 115. Mr. Speiden

120. **Materials of Construction.** I. 2 Hrs. PR: M. 102 Mr. Downs

121. **Structural Engineering.** II. 4 Hrs. PR: M. 102. Mr. Davis

122. **Structural Engineering.** I. 2 or 3 Hrs. PR: M. 102. Mr. Davis

123. **Bridge Design.** I. 3 Hrs. PR: C .E. 121 Mr. Davis

124. **Thesis.** I, II. 2 or 4 Hrs. Special design, investigation, or original research of some assigned topic relating to civil engineering. Staff

200. **Water-Power Engineering.** II. 2 Hrs. PR: C. E. 115. Mr. Speiden

201. **Hydraulic Measurements.** I, II. 1 Hr. PR: C. E. 115. Mr. Speiden

202. Water Purification. I, 3 or 4 Hrs. PR: registration in C. E. 116. Mr. Speiden

203. Sewage Disposal. II. 3 Hrs. PR: C. E. 115. Mr. Speiden

204. Advanced Structures. II. 3 Hrs. PR: C. E. 121. Mr. Davis

206. Concrete Construction. II. 3 Hrs. PR: C. E. 121 Mr. Davis

207. Foundations. I. 3 Hrs. PR: C. E. 121. Mr. Davis

208. Transportation Economics. I or II. 2 Hrs. PR: C. E. 102. Mr. Downs

209. Highway Laboratory. I. 2 Hrs. PR: M. 103. Mr. Baker

Graduate Division

351. Advanced Water-Supply Engineering. I, II. Credit to be arranged. PR: C. E. 116. Mr. Speiden

352. Sewerage and Sewage Disposal. I, II. Credit to be arranged PR: C. E. 118. Mr. Speiden

353. Advanced Design Problems. I, II. Credit to be arranged. Mr. Davis and Mr. Speiden

354. Statically Indeterminate Structures. I, II. Credit to be arranged. PR: C. E. 204. Mr. Davis

355. Soils Mechanics. I, II. Credit to be arranged. Staff

397, 398. Research. I, II. Credit to be arranged. Mr. Davis and Mr. Speiden

ELECTRICAL ENGINEERING

Professors FORMAN and HALL; Assistant Professor E. C. JONES; Instructors SEIBERT and J. E. WHITE

Undergraduate Division

2. Elementary Electrical Laboratory. S1, I, II. 1 Hr. A study of the component parts of electrical machines and apparatus. Safety rules and resuscitation. Mr. Seibert

100.* Elements of Electrical Engineering. II. 3 Hrs. Primarily for sophomores in electrical engineering. PR: Math 108 (or registration in Math 108); Physics 106 (or registration in Physics 106). Mr. Jones and Mr. Seibert

102.* 103.* Elements of Electrical Engineering. I and II. 4 Hrs. each semester. For students in mechanical and mining engineering. Mr. Hall and Mr. Seibert

104. Illumination. I, II. 2 Hrs. PR: Physics 106. Mr. Forman

106. Electronics. II. 4 Hrs. PR: E. E. 201 (or registration in E. E. 201). Theory of electronic devices, their characteristics and applications. Mr. Seibert

110. Elements of Electrical Engineering. I, II. 5 Hrs. PR: Physics 106. For students in chemical and civil engineering. Mr. Hall and Mr. Jones

124. Thesis. I, II. 2 to 5 Hrs. Special investigation or original research on some topic relating to electrical engineering. Mr. Forman and Mr. Hall

200.* Direct-Current Machinery. I. 4 Hrs. PR: E. E. 100. Mr. Jones and Mr. Seibert

201.* Alternating-Current Theory and Measurement. I. 4 Hrs. PR: E. E. 100. Mr. Forman and Mr. Jones

202.* 203* Alternating-Current Machinery. I and II. 3 Hrs. each semester. PR: E. E. 201 accompanied by E. E. 205 and 206. Mr. White

204. Electrical Calculations and Design. II. 3 Hrs. PR: E. E. 102 or 200 and 201. Mr. Jones

205.* 206.* Electrical Engineering Laboratory. I, II. 2 Hrs. To accompany E. E. 202 and 203. Mr. Jones and Mr. Seibert

207. Electrical Transmission. I. 3 Hrs. PR: E. E. 201. Mr. Hall

208. **Electric Control.** I. 2 Hrs. PR: E. E. 207. Mr. Jones and Mr. Seibert

209. **Electric Traction.** I. 2 Hrs. PR: E. E. 202. Mr. Hall

211. **Electrical Problems.** I, II. Credit to be arranged. Staff

212. **Transients.** II. 3 Hrs. PR: E. E. 201. Mr. Forman

213. **Electric Power Transmission and Distribution.** II. 3 Hrs. Advanced theory and calculations of transmission lines and net works. PR: E. E. 207. Mr. Hall

214. **Industrial Applications of Electricity.** II. 3 Hrs. PR: E. E. 103 or 203. Mr. Hall

216. **Telephone Engineering.** I. 3 Hrs. PR: E. E. 201. Mr. Forman

217. **Symmetrical Components.** II. 3 Hrs. PR: E. E. 202. Mr. Forman

218. **Electron Tubes in Industry.** I, II. 3 Hrs. PR: E. E. 200 and 201. Mr. White

219. **Differential Equations and Electric Circuits.** I. 3 Hrs. PR: E. E. 201. Differential equations and elementary circuit theory and operational calculus. Mr. Forman

220. **Engineering Economics.** II. 3 Hrs. For seniors and graduates only. Economic principles involved in the selection and design of electrical equipment and in the utilization of electrical energy. Mr. Hall

221. **Electrical Communication.** II. 3 Hrs. PR: E. E. 219. History, theory, and practice in electrical communication systems. Mr. Forman

222. **Advanced Electrical Laboratory.** II. 2 Hrs. PR: E. E. 206. Advanced and special laboratory problems. Mr. Jones

Graduate Division

397, 398. **Research.** I, II. Credit to be arranged. Advanced research or special investigations on some topic related to electrical engineering. Mr. Forman or Mr. Hall

GENERAL

Professors FORMAN and BOOMSLITER

Undergraduate Division

1. **Engineering Lectures.** I. (No credit). Required of all freshmen in engineering. A series of lectures designed to acquaint the engineering student at the beginning of his course with the profession he has chosen. Mr. Boomsliter

101. **Engineering Society.** I, II. ½ Hr. Primarily for juniors. Required of all candidates for degrees in engineering. Membership, attendance, and active participation in Engineering Society. Mr. Forman and Committee

102. **Engineering Society.** I, II. ½ Hr. Continuation of G. 101. For juniors. Mr. Forman and Committee

103. **Engineering Society.** I, II. ½ Hr. For seniors. Required of all candidates for degrees in engineering. Continuation of G. 101 and 102. Mr. Forman and Committee

104. **Engineering Society.** I, II. ½ Hr. Continuation of G. 103. For seniors. Mr. Forman and Committee

110. **Business Law.** I, II. 3 Hrs. General principles of business law. The law of contracts. Standard contract forms. PR; Economics 103, or 1 and 2, and M. 102. Mr. Boomsliter

MECHANICAL ENGINEERING

Drawing, Machine Construction, Power Engineering, Machine Design, Industrial Engineering and Aeronautical Engineering

Professors HAYES and GRUMBEIN; Associate Professor H. M. CATHER; Assistant Professors GROW, KEISTER, and B. S. WHITE; Instructors SEAMAN, CARL, L. E. JONES, HASSETT, MARTIN, and PARSONS

Undergraduate Division

2.* **Woodworking.** I. 2 Hrs. Mr. Seaman

3.* **Woodworking.** I, II. 2 Hrs. PR: M. E. 2. Mr. Seaman

4.* **Pattern Making.** I. 2 Hrs. PR: M. E. 6. Mr. Seaman

6. **Foundry.** I, II. 1 Hr. Mr. Seaman and Mr. Carl

7.* **Welding and Heat Treatment.** I, II. 1 Hr. Mr. Jones and Mr. Martin

8S. **Woodfinishing.** S1. 2 Hrs. The proper selection of colors for different kinds of wood, the mixing of fillers, stains, and paints, the application of varnish, shellac, and oil finishes. Mr. Seaman

10.* **Pipefitting.** I, II. 1 Hr. Mr. Carl

11.* **Machine Work.** I, II. 2 Hrs. Mr. Jones and Mr. Martin

12.* **Machine Work.** I, II. 1 Hr. Continuation of M. E. 11 which is a prerequisite. Mr. Jones and Mr. Martin

13S.* **Machine Work.** S1. 3 Hrs. Equivalent to M. E. 11 and 12. Four hours per day for six weeks. Mr. Jones and Mr. Martin

20.* **Mechanical Drawing.** I, II. 3 Hrs. Staff

21S. **Mechanical Drawing.** S1. 2 Hrs. The use and care of drawing instruments, freehand sketching, and lettering. This course is intended for those who are teaching manual training in public schools. Mr. Hayes

23. **Mechanical Drawing.** II. 2 Hrs. Continuation of M. E. 20. For mining engineering students only. Mr. Grow

24.* **Empirical Design.** I, II. 2 Hrs. PR: M. E. 11 or 13S, and M. E. 20. Staff

26.* **Descriptive Geometry.** I, II. 3 Hrs. PR: M. E. 20 and solid geometry. Staff

27. **Mechanism.** I, II. 2 Hrs. Lectures, recitations, and graphical solutions. PR: M. E. 20 and 26. Staff

29.* **Mechanism.** I, II. 4 Hrs. Lectures, recitations, and graphical solutions. Staff

31. **C. A. A. Primary Ground School.** I, II. 2 Hrs. Mr. Keister

32. **Secondary Ground School.** I, II. 5 Hrs. PR. M. E. 31 Mr. Keister

101.* **Woodworking.** I, II. 2 Hrs. Continuation of M. E. 3. Mr. Seaman

103.* **Foundry Work.** Semester and credit to be arranged. Advanced work for special students. Continuation of M. E. 6. Mr. Seaman and Mr. Carl

105.* **Machine Construction.** I, II. 2 Hrs. Continuation of M. E. 13S. Two three-hour periods. Mr. Jones and Mr. Martin

106.* **Shop Methods.** II. 2 or 3 Hrs. Continuation of M. E. 105. Two three-hour periods. Mr. Jones

107.* **Machine Construction.** Semester and credit to be arranged. Advanced work for special students. Continuation of M. E. 105 and 106. Mr. Jones

111. **Machine Design.** I, II. 2 Hrs. PR: M. 102 and M. E. 29. Mr. Hayes

113. **Machine Design.** I, II. 4 Hrs. PR: M. 102 and M. E. 29. Two lectures and recitations and two 3-hour computation periods. Mr. Hayes and Mr. White

122. **Mechanical Laboratory.** I, II. 2 Hrs. PR: Physics 106 and M. 101, and accompanying M. E. 221. Mr. Grumbein and Mr. Cather

123. **Engineering Laboratory.** I. 2 Hrs. PR: M. E. 122. Mr. Grumbein and Mr. Cather

124. **Thesis.** I, II. 2 to 4 Hrs. Investigation or original research on some special topic relating to mechanical engineering. Staff

203. **Advanced Machine Design.** I. 4 Hrs. Continuation of M E. 113. Two lectures and recitations and two 3-hour computation periods. Mr. Hayes and Mr. White

205. **Industrial Engineering.** I. 3 Hrs. Mr. Hayes

206. **Industrial Engineering.** II. 3 Hrs. PR: M. E. 205. Mr. Hayes

220. **Heat and Power Engineering.** I, II. 3 Hrs. PR: Phys. 105 and 107 and Math. 108. Mr. Grumbein and Mr. Cather

221.* **Thermodynamics of Engineering.** I, II. 3 Hrs. PR: Physics 105 and 107, and Math. 108 (or reg. in Math. 108). Mr. Grumbein and Mr. Cather

222.* **Heat Engines.** II. 3 Hrs. Continuation of M. E. 221. Mr. Grumbein and Mr. Cather

223.* **Steam Power Plants.** I. 3 Hrs. PR: M. E. 221. Mr. Grumbein and Mr. Cather

224. **Steam Turbines.** I, II. 3 Hrs. PR: M. E. 222. Mr. Grumbein and Mr. Cather

225. **Gas Engines and Gas Engineering.** II. 3 Hrs. Fuel gases, gas production and transmission, gas engines, etc. PR: M. E. 222. Mr. Grumbein and Mr. Cather

227. **Steam Power Plant Design.** II. 2 Hrs. Continuation of M. E. 223. Mr. Grumbein and Mr. Cather

228. **Engineering Laboratory.** II. 2 Hrs. PR: M. E. 123. Mr. Grumbein and Mr. Cather

229. **Internal Combustion Engines.** II. 2 Hrs. PR: M. E. 222. Mr. Cather

230. **Airplane Structures.** I. 3 Hrs. PR: Math. 108, M. 104, M. E. 105. Mr. Keister

231. **Airplane Structures.** II. 3 Hrs. PR: M. E. 230 Mr. Keister

232. **Airplane Design.** II. 3 Hrs. PR: M. E. 230. Mr. Keister

233. **Aerodynamics.** I. 3 Hrs. PR: M. 104. Mr. Keister

Graduate Division

397, 398. **Research.** I, II. Credit to be arranged. Investigation or original research on some special topic relating to mechanical engineering. Mr. Hayes and Staff

MECHANICS

Professor BOOMSLITER; Associate Professor C. H. CATHER; Assistant Professor LAWSON

Undergraduate Division

101.* **Statics.** I, II. 3 Hrs. PR: Math. 108 (or registration in Math. 108), and Physics 105 and 107. Mr. Boomsliter, Mr. Cather, and Mr. Lawson

102.* **Mechanics of Materials.** I, II. 4 Hrs. PR: M. 101. Mr. Boomsliter and Mr. Cather

103.* **Materials Testing Laboratory.** I, II. 1 Hr. PR: Registration in M. 102. Mr. Boomsliter, Mr. Cather and Mr. Lawson

104.* **Kinetics.** I, II. 3 Hrs. Continuation of M. 101. PR: M. 101. Mr. Boomsliter, Mr. Cather and Mr. Lawson

200. **Advanced Mechanics of Materials.** I or II. 2 to 4 Hrs. PR: M. 102. Mr. Boomsliter

201. **Advanced Kinetics.** II. 3 Hrs. PR: M. 101 and 104. Mr. Boomsliter

202. **Advanced Materials Laboratory.** I or II. 2 to 4 Hrs. PR: M. 102. Mr. Boomsliter

COURSES IN THE SCHOOL OF MINES

Professor McELROY and Associate Professor STAAB

Undergraduate Division

100. **Mine Surveying.** I. 2 Hrs. PR: C. E. 1. Mr. Staab

101. **Mine Surveying.** II. 2 Hrs. PR: E. M. 100. Mr. Staab

102S. **Mine Surveying.** SI. 5 Hrs. This course is a continuation of and gives field practice supplementing E. M. 101. It must be taken during the summer term immediately following the semester in which E. M. 101 is taken. Mr. Staab

106.* **Elementary Mineralogy.** I, II. 1 or 2 Hrs. PR: Chemistry 4. Mr. Staab

107. **Mining Methods.** II. 4 Hrs. Inspection trips, with written reports, are required. PR: Physics 106. Mr. Staab

111. **Mining.** I. 2 Hrs. Explosives, timbering, drilling, and shaft sinking. PR: Chemistry 6 and Physics 106. Mr. Staab

114. **Mine Management.** II. 2 Hrs. PR: E. M. 212. Mr. McElroy

115. **Mine Design.** I. 2 Hrs. PR: E. M. 212 and registration in C. E. 122. Mr. McElroy

116. **Mine Design.** II. 3 Hrs. Continuation of E. M. 115, which is prerequisite. Mr. McElroy

117. **Industrial Safety Engineering.** I. 3 Hrs. PR: Senior standing. Mr. McElroy

118. **Coal Preparation.** II. 3 Hrs. PR: E. M. 212 and 202. Mr. Staab

119. **Mine Equipment and Machinery.** II. PR: E. E. 102 and E. M. 212. Mr. McElroy

120. **Thesis.** I, II. 2 to 4 Hrs. An individual problem on some phase of mining. None but exceptional students having high scholastic standing will be permitted to elect this course. Mr. McElroy and Mr. Staab

201.* **Oil-Field Development.** I. 2 Hrs. PR: Geology 3. Mr. Staab

202. **Coal Laboratory.** I. 1 Hr. Coal Analysis. PR: Chemistry 6 or Chem. 15. Mr. McElroy and Mr. Staab

203.* **Geological Surveying.** II. 2 Hrs. PR: E. M. 101 and Geology 161. Mr. Staab

204. **Oil and Gas Production.** II. 4 Hrs. PR: E. M. 201 and M. 101 Mr. Staab

205. **Gas Measurement Engineering.** II. 2 Hrs. PR: E. M. 201 and C. E. 115. Mr. Staab

212. **Coal Mining.** II. 4 Hrs. Haulage, hoisting, and drainage. PR: E. M. 111. Mr. McElroy

213. **Mine Ventilation.** I. 3 Hrs. PR: E. M. 212 and 107. Mr. McElroy

Graduate Division

301, 302. **Advanced Mine Design.** I, II. Credit to be arranged. Advanced detail design and layout of coal mine plant, particularly incorporating new ideas of machines and mining methods. Mr. McElroy

351S. **Coal Mining.** SI. 3 Hrs. PR: Chemistry 10 hours, physics 8 hours, and accomplished or preceded by general geology. This course is designed especially for students who are planning to teach mining subjects in high school, and is not open to students taking E. M. 102S, 111, and 212. Hours to be arranged. Mr. McElroy and Mr. Staab

397, 398. **Research.** I, II. Credit to be arranged. An individual problem in some phase of mining. A carefully prepared report is required. Mr. McElroy and Mr. Staab

The Graduate School

ORGANIZATION

By order of the Board of Governors of West Virginia University a University Graduate School is established, whose roots are implanted in all University undergraduate work, irrespective of departments or schools. The Graduate School is empowered (1) to direct research and investigation with particular reference to the problems of the State, and (2) to train and recommend to the Board of Governors candidates for the degrees of Master of Science, Master of Science in Home Economics Education, Master of Science in the various Engineering branches, Master of Arts, Master of Music, and Doctor of Philosophy.

All regulations governing the Graduate School, such as the determination of curricula, projects, majors, minors, standards, thesis requirements, and like and similar matters shall be formulated by the Graduate Council and presented to the Graduate Faculty for its consideration and action.

The Student Body

Seniors in the colleges of West Virginia University who are within 10 semester hours of graduation may, with the approval of the Graduate Council, enroll for courses in the Graduate School, for which they may receive graduate credit after obtaining their bachelors' degrees. Such graduate courses must not have been offered for undergraduate credit, and in every case permission must have been requested before or at the time of enrolling for the course or courses.

The Adviser

The adviser will arrange a specific course of study to be approved by the Council and, in the case of candidates for advanced degrees, will preside at the candidate's qualifying and final examinations.

REQUIREMENTS FOR GRADUATE DEGREES

(For a list of graduate degrees offered see page 55)

General Regulations

1. *Candidacy*:

Admission to candidacy for any graduate degree is conditioned upon the fulfillment of the requirements for admission to the Graduate School, and also the particular requirements of undergraduate preparation for the field of study in which the student wishes to specialize. Detailed information concerning candidacy for the Master's degrees and the degree of Doctor of Philosophy may be found on the pages immediately following.

2. *Scholarship*:

No credits are acceptable toward an advanced degree which are reported with a grade lower than C.

Reasonable standards of oral and written English must be maintained.

3. *Curriculum*:

Credit toward a graduate degree may be obtained only for courses listed in this Catalogue and numbered 200-399.

No more than fifteen hours of graduate courses in any one semester nor more than six hours of graduate courses in any one term of the summer session may be carried by a student. Any exceptions to this rule must be approved in advance by the Graduate Council.

4. *Residence and Extension*:

Residence credit for special field assignments and for work taken off the University Campus shall be allowed only with the prior approval of the Graduate Council.

No more than 15 hours of extension work may be counted by any one student toward the Master's degree.

The maximum credit that students pursuing graduate work by extension may receive in any one field shall be 8 semester hours.

Each graduate student in residence, whether taking course work or engaged in conducting research or in writing a thesis or report, must register at the beginning of each semester or term during which graduate work is being done. He must be registered during the session in which he is to appear for final examination. Under exceptional conditions and with the prior approval of the Graduate Council a graduate student may be permitted to meet a portion of the requirements for the degree **in absentia**, provided the customary residence and other requirements are met.

5. *Thesis and Problem Reports*:

All theses and problem reports shall be presented in the form prescribed by the Graduate Council at least one month previous to the Commencement Day on which the degree is expected. If the thesis or problem report is accepted, typewritten and bound copies shall be submitted to the Secretary of the Graduate Council at least one week before the degree is to be conferred; a minimum of three copies of the master's or doctor's thesis or problem report is required.

6. *Final Examination*:

The candidate shall not be eligible for the final examination until his thesis or problem report has been approved by the examining committee. Following the approval of the candidate's thesis or problem report and the satisfactory completion of the courses in residence and the satisfaction of other graduate requirements, he shall be given a final examination by his advisory committee.

7. *Commencement*:

At the time of registration for the semester or session in which the candidate expects to receive a graduate degree, he shall submit a formal request to the Chairman of the Graduate Council for the conferring of such degree. The candidate must have completed all requirements for the degree which he wishes to receive, at least one week before Commencement Day.

The Degrees of Master of Arts and Master of Science

REQUIREMENTS FOR CANDIDACY

Satisfactory fulfillment of General Regulation No. 1 for graduate degrees (stated above) will admit an applicant to candidacy.

REQUIREMENTS FOR COMPLETION

The completion within a period of 7 years immediately preceding the conferring of the degree, except with the permission of the Graduate Council, of no less than 30 credit hours of graduate work approved by the adviser.

RESIDENCE: A minimum is required of two semesters, or one semester and three summer terms, or five summer terms of residence in full-time graduate study at West Virginia University. For students offering 15 credit hours in extension, a minimum period of residence at West Virginia University of one semester or three summer terms shall be required for the Master's degree.

THESIS OR PROBLEM REPORT: A thesis or problem report granting no more than 6 hours of credit may be required by the faculty of the college, school, or department in which the candidate's major interest lies.

FINAL EXAMINATION: An examination, oral or written or both at the option of the candidate's examining committee, shall be required, covering the candidate's thesis or problem report, studies in his major and minor fields, and his ability to apply facts and principles.

SPECIAL REQUIREMENTS: The candidate must meet the special requirements of the department in which he pursues his major study.

The Degree of Doctor of Philosophy

REQUIREMENTS FOR CANDIDACY

Admission to the Graduate School and enrollment in graduate courses does not of itself imply acceptance of the applicant for a doctor's degree. After a period of residence the applicant will be admitted to a comprehensive preliminary or qualifying examination (either oral or written or both) in which he must demonstrate (a) a grasp of the important phases and problems of the field of study in which he proposes to major and an appreciation of their relation to other fields of human knowledge and accomplishments, (b) the ability to employ rationally the instruments of research that have been developed in his major field, and (c) the ability to read French and German to the satisfaction of his examining committee.[1]

When an applicant has successfully passed his qualifying examination he will be formally promoted to candidacy for the doctor's degree. Admission to candidacy must precede the final examination for the doctor's degree by at least one academic year. Graduate courses pursued in fulfillment of the requirements for the master's degree, if of suitable character and quality, may be credited toward the doctorate.

[1]With the approval of the Graduate Council, one other language may be substituted for French or German.

REQUIREMENTS FOR COMPLETION

(a) CURRICULUM: The degree of Doctor of Philosophy is not awarded for the mere accumulation of course credits nor for the completion of a definite residence requirement. The exact amount and nature of course work to be undertaken by a candidate will be determined in the light of his previous preparation and the demands of his chosen field of application. The aggregate of correlated courses of graduate instruction should, however, be no less than 60 semester hours, exclusive of research or thesis, except research or thesis credits earned for the Master's degree. These credits shall be ordered and distributed so as to promote broad and systematic knowledge and the ability to carry on independent research.

(b) RESIDENCE: In general, the requirements for the Doctor of Philosophy degree contemplate at least three years of full-time graduate work beyond the bachelor's degree. A minimum of 36 weeks in residence in full-time graduate study at West Virginia University is required.

(c) THESIS: The candidate must submit a thesis pursued under the direction of the faculty of this University on some problem in the field of his major interest. The thesis must present the results of the candidate's individual investigations and must embody a definite contribution to knowledge.

(d) SPECIAL REQUIREMENTS: The candidate must satisfy such special requirements subject to the approval of the Graduate Council, as may be required by the faculty of the college or department in which his major lies. All required examinations in modern languages shall be taken not later than one academic year before the final examination for the degree.

(e) FINAL EXAMINATION: If the candidate's thesis is approved and he has fulfilled all other requirements stated above, he will be admitted to final oral examination on his thesis before his examining committee. At the option of this committee, a comprehensive written examination may also be required.

The School of Journalism

ORGANIZATION AND PURPOSE

The first instruction in journalism at West Virginia University consisted of a two-hour course in news writing offered in 1915 in the Department of English of the College of Arts and Sciences. A sequence of professional courses was inaugurated by the same department in 1920. As the demand increased, a complete professional curriculum was made available. In 1927 an additional full-time instructor was engaged, larger quarters were obtained, and a separate Department of Journalism was created.

In consequence of the substantial development over nearly two decades and in view of the rapid advancement of professional schools of journalism throughout the nation, the University Board of Governors on April 22, 1939, separated the journalism unit from the College of Arts and Sciences and reorganized it as a School of Journalism with an administrative status similar to that of other schools and colleges of the University. The school graduated its first class, consisting of nine men and five women, in 1940.

The main purposes of the school are these: (1) to find and prepare superior young men and young women who contemplate reporting and other journalistic writing, or the editing and management of newspapers or special periodicals, as a career; (2) to provide in addition to thorough and complete technical training the broad informational background and sure intellectual discernment that distinguish educated persons; (3) to cultivate a full sense of the responsibility that modern newspaper men and women must assume in their relation to the community, state, and nation, and familiarize them with tested procedure in pursuing objectives of high social value; (4) to stimulate an inquiring attitude toward journalism as an institution and promote scholarly research in its various branches; (5) to furnish a suitable educational foundation for persons looking forward to business or professional work closely related to journalistic practice.

From the beginning the instruction in journalism at West Virginia University has been in accord with the best professional-school standards. The emphasis has ever been on quality, not numbers. Only students with a scholastic rating of approximately B or higher have been encouraged to take the basic courses in reporting, and those not able to maintain an equally high standing in the first journalism courses have been requested to choose a major elsewhere.

The instructional staff has been engaged with careful attention to their individual ability to give expert instruction in particular fields. The curriculum has been kept constantly abreast of progress in leading educational centers. Class sizes have never reached proportions where individual instruction had to be sacrificed. The school now conforms to recognized national standards and is ranked with the superior professional schools of the United States.

Opportunities for applying the principles of sound newspaper practice are good. The Daily Athenaeum, a five-day campus newspaper, is produced by journalism students in the various workrooms of the school where laboratories are conducted from 2 to 5 p. m. and from 7:30 to 10:30 p. m. every day except

Saturday and Sunday. Reporters working on news runs cover the University community thoroughly, and trained deskworkers not only edit the local reporters' copy but also prepare for publication the dispatches of state, national, and world news received every night by wire from the United Press. Local pictures are taken by the campus daily's own staff photographer, and other news pictures are selected from mats purchased from a national distributor.

All reporters serve as correspondents of weekly and daily newspapers. Some get additional practice by working part-time for Morgantown dailies or by taking vacation positions on newspapers of their home community. As a rule, student journalists have staff positions on, or are regular contributors to, other campus publications such as the Monticola, the Moonshine, and the Alumni Magazine.

ADMISSION

A candidate seeking admission to the School of Journalism with the view of obtaining a degree must have satisfied the requirements for matriculation in one of the University undergraduate colleges and must have earned at least 60 semester hours of college credit. A student deficient in physical education and military science will be required to obtain them as soon as possible.

During his freshman and sophomore years he should have completed satisfactorily all or most courses specified for pre-journalism majors. A regularly enrolled student may elect courses numbered below 100 provided such action will be advantageous in connection with a major or minor sequence and provided the total credit value of such courses does not exceed 12 hours. For all such courses, however, in excess of 6 hours taken during any one semester the maximum number of honor points that may be acquired will be one for each hour of credit. A pre-journalism student not maintaining at least a C average during his first two years in all college subjects is strongly advised not to enroll in the professional school.

Before or soon after entering the University, a student planning to become a journalism major should learn the touch system of typewriting. After a few weeks every reporter is required to submit copy in typewritten form. He will find it especially advantageous to have his own machine.

Since shorthand is of great practical value and frequently aids a graduate in obtaining a position, every student is urged — although not required — to learn it before coming to college or during his freshman or sophomore year.

REQUIREMENTS FOR THE DEGREE

To be eligible for graduation, a student must maintain as a minimum in the junior and senior years an average of one and one-fourth honor points for every semester hour of credit earned.

A candidate who has satisfied all general requirements of the University and who as a regularly enrolled student of the School of Journalism has earned 64 semester hours of credit of a value specified in the foregoing and in the subjects listed in one of the professional curricula hereinafter outlined will be recommended for the degree of Bachelor of Science in Journalism, provided the combined number of his credits acquired as a pre-journalism student and as a

regularly enrolled journalism major totals no fewer than 128. As a minimum professional requirement, 25 of the 64 semester credits earned after the student has enrolled in the school must be obtained in journalism subjects. Moreover, no fewer than 60 of the 64 hours mentioned above shall be obtained in courses numbered between 100 and 300.

CURRICULA

The School of Journalism offers three curricula designed to fit students for specialized branches of journalistic practice or for occupations or professions for which journalistic training is desirable or necessary preparation. Each sequence leads to the degree of Bachelor of Science in Journalism.

The News-Editorial Curriculum

The news-editorial sequence is designed primarily for the student who wishes to prepare himself for work as a reporter, copyreader, special writer, or departmental editor and who hopes to advance later to a still more responsible position in the general news and editorial field.

THIRD YEAR

First Semester	*Hrs.*	*Second Semester*	*Hrs.*
Jour. 103—Copy Editing	3	Jour. 104—Copy Editing	3
Jour. 220—Feature Writing	3	Jour. 127—Hist. of Amer. Jour.	3
Jour. 125—Newspaper Administration	2	Jour. 106—Applied Newspaper Management (required of men; elective for women)*	1
Jour. 105—Applied Newspaper Management (required of men; elective for women)*	1	Eng. 164—Eng. Lit.	3
Pol. Sc. 106—Amer. State and Local Gov't.	3	Phil. 104—Intro. to Phil.	3
Soc. 101—Intro. to Soc.	3	Advanced Pol. Sc.	3
Electives	1-3	Electives	0-3
	16-18		16-18

FOURTH YEAR

First Semester	*Hrs.*	*Second Semester*	*Hrs.*
Jour. 230—Editorial Writing and Policy	3	Jour. 231—Social Responsibility of Journalism	3
Jour. 221—Critical Writings or Jour. 120—News Photography	2	Jour. 128—Adv. Reporting	3
Eng. 142—Shakespeare	3	Jour. 210—Law of the Press	2
Electives	8-10	Advanced social science or literature or language	3-7
	16-18	Electives	1-7
			16-18

* Women not electing Journalism 105 and 106 will be required to devote an equivalent amount of time each semester to a course in one of the following groups of studies: secretarial training, library science, home economics, and education.

The Advertising-Management Curriculum

The advertising-management professional sequence is arranged for the student who expects to enter some branch of the business department of a newspaper and who looks forward sooner or later to the management or ownership of a publication. Opportunities in the business department are considered even better than in the news-editorial branch.

THIRD YEAR

First Semester	*Hrs.*	*Second Semester*	*Hrs.*
Jour. 103—Copy Editing	3	Jour. 110—Newspaper Typography	2
Jour. 113—Newspaper Advertising	3	Jour. 112—Publicity Methods	2
Jour. 125—Newspaper Administration	2	Jour. 108—Community Newspaper	2
Jour. 105—Applied Newspaper Management	1	Jour. 106—Applied Newspaper Management	1
Pol. Sc. 106—Amer. State and Local Government	3	Geol. 109—Economic Geography	2
Soc. 101—Intro. to Sociology	3	Eng. 164—English Lit.	3
Electives	1-3	Pol. Sc. 107—Amer. City Government	3
		Electives	1-3
	16-18		16-18

FOURTH YEAR

First Semester	*Hrs.*	*Second Semester*	*Hrs.*
Jour. 230—Editorial Writing and Policy	3	Jour. 231—Social Responsibility of Journ.	3
Eng. 142—Shakespeare	3	Jour. 128—Adv. Reporting	3
Econ. and Bus. Administration	6	Jour. 210—Law of the Press	2
Electives	4-6	Econ. and Bus. Administration	6
		Electives	2-4
	16-18		16-18

The General Curriculum

The general curriculum is planned for the student who desires to make journalism a special field of concentration while he is getting a broad, general education of modern content. Many who complete this sequence will take a position in high school as a teacher of journalism, English, and social sciences, and will have charge of the school publications. Some will find employment as public-relations writers or directors, or as secretaries or assistants to executives. Others may enter the federal or state civil service or engage in still other kinds of work for which journalistic training provides a suitable foundation.

THIRD YEAR

First Semester	*Hrs.*
Jour. 103—Copy Editing	3
Jour. 220—Feature Writing	3
Pol. Sc. 106—Amer. State and Local Government	3
Soc. 101—Intro. to Sociology	3
Electives	4-6
	16-18

Second Semester	*Hrs.*
Jour. 127—Hist. of Amer. Journalism	3
Jour. 108—Community Newspaper	2
Eng. 164—English Lit.	3
Geol. 109—Economic Geography	2
Phil. 104—Intro. to Philosophy	3
Advanced Social science, or literature, or language	3
Electives	0-2
	16-18

FOURTH YEAR

First Semester	*Hrs.*
Jour. 230—Editorial Writing and Policy	3
Jour. 221—Critical Writing	2
Jour. 113—Newspaper Advertising	3
Eng. 142—Shakespeare	3
Second field of concentration	5-7
	16-18

Second Semester	*Hrs.*
Jour. 231—Social Responsibility of Journalism	3
Jour. 112—Publicity Methods	2
Jour. 128—Advanced Reporting	3
Jour. 210—Law of the Press	2
Jour. 215—High School Jour. and Student Publications	2*
Second field of concentration	6-8
	16-18

GRADUATE STUDY

Although at the present time the School of Journalism is devoting its instructional facilities chiefly to professional curricula that lead to the degree of Bachelor of Science in Journalism, it frequently provides a graduate minor for students taking the master's degree in a field of specialization related to journalism.

THE PLACEMENT OF GRADUATES

During the past two decades alumni who had completed all or most of the professional courses in journalism have found little difficulty in finding desirable positions. Although the school cannot guarantee positions to graduates, it is glad to assist them in learning of openings and in making contact with employers. To this end it maintains without charge a placement register for both current and past graduates. Students and alumni are also invited to make free use of the University Placement Service in charge of H. E. Stone, secretary of loans and placement.

*Required only of majors contemplating high-school teaching and the supervision of high-school publications.

COURSES OF INSTRUCTION

Professor REED and Assistant Professors MICHELSON and WILD

(For explanation of abbreviations see page 81)

1. **Newspaper Reporting.** I, II. 3 Hrs. Two lectures and three laboratory hours. Students are required to know how to use a typewriter or to acquire such knowledge during the first half of the semester. PR: English 1 and 2, with a final mark of C plus or higher in each. Mr. Michelson

2. **Newspaper Reporting.** I, II. 3 Hrs. Two lectures and three laboratory hours. Continuation of Journalism 1, which is prerequisite. Mr. Michelson

103. **Copy Editing.** I. 3 Hrs. PR: Journalism 1 and 2 or consent of instructor. Mr. Wild and Mr. Michelson

104. **Copy Editing.** II. 3 Hrs. PR: Journalism 103 or consent of instructor. Mr. Wild and Mr. Michelson

105. **Applied Newspaper Management.** I. 1 Hr. Two laboratory hours. PR: Journalism 1 and 2 or consent of instructor. Mr. Wild

106. **Applied Newspaper Management.** II. 1 Hr. Two laboratory hours. PR: Journalism 1 and 2 or consent of instructor. Mr. Wild

108. **The Community Newspaper.** II. 2 Hrs. PR: Journalism 1 and 2 or consent of instructor. Mr. Wild

110. **Newspaper Typography.** II. 2 Hrs. PR: Journalism 1 and 2 or consent of instructor. Mr. Wild

112. **Publicity Methods.** II. 2 Hrs. Mr. Wild

113. **Newspaper Advertising.** I. 3 Hrs. Mr. Wild

120. **News Photography.** I. 2 Hrs. PR: Journalism 1 and 2 or consent of instructor. Mr. Michelson

122. **Radio News-and-Feature Techniques.** I. 1 Hr. Two laboratory hours. PR: Journalism 1 and 2, or consent of instructor. Mr. Michelson

123. **Radio News-and-Feature Techniques.** II. 1 Hr. Two laboratory hours. PR: Journalism 1 and 2 or consent of instructor. Mr. Michelson

125. **Newspaper Administration.** I. 2 Hrs. PR: Journalism 1 and 2 or consent of instructor. Mr. Wild

127. **History of American Journalism.** II. 3 Hrs. Mr. Reed

128. **Advanced Reporting.** II. 3 Hrs. For seniors in journalism. Mr. Michelson

210. **Law of the Press.** II. 2 Hrs. For seniors and graduates. Mr. Michelson

215. **High School Journalism and Student Publications.** II. 2 Hrs. Mr. Reed

220. **Feature Writing.** I. 3 Hrs. For seniors and graduates. Mr. Reed

221. **Journalistic Critical Writing.** I. 2 Hrs. For seniors and graduates. Mr. Reed

230. **Editorial Writing and Policy.** I. 3 Hrs. For seniors and graduates. Mr. Reed

231. **Social Responsibility of Journalism.** II. 3 Hrs. For seniors and graduates. Mr. Reed

The College of Law

HISTORY AND ORGANIZATION

The College of Law, established in 1878, is the oldest professional school in the University.

In 1897 the course of study was increased from one year to two years. Since 1912 the degree of Bachelor of Laws has been conferred only upon the satisfactory completion of three years of law-school work. From 1913 to 1924 the requirement for admission was one year of college work; from 1924 to 1931 the requirement was two years. Since 1931 the minimum pre-law requirement for the degree has been three years of work of collegiate grade in an institution of approved standing.

In 1914 the College of Law was admitted to membership in the Association of American Law Schools, which is an organization of leading schools for the purpose of maintaining high standards in legal education. The College of Law is on the list of schools approved by the American Bar Association.

THE PROGRAM OF INSTRUCTION[1]

It is the primary aim of the law school to give the student an adequate preparation for the practice of law. This involves not merely imparting a knowledge of the legal rules and other materials which courts employ, but also, what is equally important, a training in the technique of legal thinking. The work of the student is based chiefly upon the study and discussion of decided cases and statutes, with collateral reading of textbooks and periodicals, elucidated by free discussion in the class. Special emphasis is given to those West Virginia cases and statutes which differ from the general law. Within limits, the school also seeks to inculcate an appreciation of the place of law in the ordering of society and to consider the problem of how law may more effectively adjust human relations.

The following program of instruction is designed with these ends in view. The work of the first year is prescribed. All courses other than first year courses are elective. Neither less than 13 nor more than 16 hours may be carried without the consent of the Committee on Scholarship.

First-Year Courses

Agency. 2 Hrs.
Two hours a week in the second semester. Mechem, Cases on Agency (2d ed. by Seavey). Mr. Abel

Common Law Remedies. 2 Hrs.
Two hours a week in the first semester. Sunderland, Cases on Common Law Pleading (2d ed.). Mr. Carlin

Contracts. 6 Hrs.
Three hours a week throughout the year. Williston, Cases on Contracts (3d ed.). Mr. Colson

[1]The program of courses as given here is subject to change.

Criminal Law. 3 Hrs.
Three hours a week in the first semester. Harno, Cases on Criminal Law and Procedure. Mr. Lugar

Equity I. 3 Hrs.
Three hours a week in the second semester. Walsh, Cases on Equity. Mr. Lugar

Personal Property. 2 Hrs.
Two hours a week in the first semester. Warren, Cases on Property (2d ed.). Mr. Williams

Real Property I. 4 Hrs.
Four hours a week in the second semester. Warren, Cases on Property (2d ed.).

Torts. 6 Hrs.
Three hours a week throughout the year. Bohlen, Cases on Torts (4th ed. by Harper). Mr. Dickinson

Courses Open to Second-Year and Third-Year Students

Administration of Insolvent Estates. 2 Hrs.
Two hours a week in the first semester. Casebook to be announced. Mr. Colson

Common Law Pleading (Including Drafting of Pleadings). 4 Hrs.
Four hours a week in the second semester. Sunderland, Cases on Common Law Pleading (2d ed.). Mr. Carlin

Constitutional Law. 4 Hrs.
Four hours a week in the first semester. Casebook to be announced. Mr. Abel

Damages. 2 Hrs.
Two hours a week in the first semester. McCormick, Cases on Damages. Mr. Dickinson

Equity II. 3 Hrs.
Three hours a week in the first semester. Walsh, Cases on Equity. Mr. Lugar

Insurance. 2 Hrs.
Two hours a week in the second semester. Vance, Cases on Insurance (2d ed.). Mr. Colson

Legal Ethics. 1 Hr.
One hour a week in the second semester. Hicks, Organization and Ethics of the Bench and Bar. Mr. Carlin

Negotiable Instruments. 3 Hrs.
Three hours a week in the first semester. Smith and Moore, Cases on Bills and Notes (3d ed.). Mr. Dickinson

Persons. 2 Hrs.
Two hours a week in the first semester. Madden and Compton, Cases on Domestic Relations. Mr. Colson

Public Utilities. 4 Hrs.
Four hours a week in the second semester. Robinson, Cases on Public Utilities (2d ed.). Mr. Hardman

Quasi Contracts. 2 Hrs.
Two hours a week in the second semester. Patterson, Cases on Contracts II (Vol. 2). Mr. Abel

Real Property II (Including Mineral Leases). 2 Hrs.
Two hours a week in the first semester. Kulp, Cases on Oil & Gas (2d ed.). Mr. Williams

Real Property III (Including Wills and Administration). 4 Hrs.
Four hours a week in the second semester. Leach, Cases on Future Interests, and Mechem and Atkinson, Cases on Wills and Administration.
Mr. Williams

Sales of Personal Property. 3 Hrs.
Three hours a week in the first semester. Woodward, Cases on Sales (3d ed.). Mr. Abel

Trusts. 4 Hrs.
Four hours a week in the second semester. Scott, Cases on Trusts (3d ed.). Mr. Colson

Use of Law Books. 1 Hr.
One hour a week in the second semester. Law Books and Their Use.
Mr. Dickinson

Workmen's Compensation. 1 Hr.
One hour a week in the second semester. Selected West Virginia materials.
Mr. Abel

Courses Open Only to Third-Year Students

Administrative Law. 3 Hrs.
Three hours a week in the second semester. Casebook to be announced.
Mr. Abel

Conflict of Laws. 4 Hrs.
Four hours a week in the second semester. Beale, Cases on Conflict of Laws (2d ed.). Mr. Dickinson

Corporations. 4 Hrs.
Four hours a week in the first semester. Ballantine and Lattin, Cases on Corporations. Mr. Williams

Drafting Legal Instruments. 1 Hr.
One hour a week in the second semester. Mr. Carlin

Equity Pleading and Practice. 2 Hrs.
Two hours a week in the first semester. Prerequisite: Common Law Pleading. Clephane, Equity Pleading and Practice, and selected cases and statutes. Mr. Carlin

Evidence. 4 Hrs.
Four hours a week in the first semester. Morgan and Maguire, Cases on Evidence. Mr. Hardman

Practice and Procedure. 4 Hrs.
Four hours a week in the first semester. Prerequisite: Common Law Pleading. Selected cases, statutes, and lectures. Mr. Carlin

Practice Court. 2 Hrs.
Two hours a week in the second semester. Prerequisites: Common Law Pleading and Practice and Procedure. Mr. Carlin

Taxation. 3 Hrs.
Three hours a week in the second semester. Magill and Maguire, Cases on Taxation (2d ed.). Mr. Lugar

THE PRACTICE COURT

Supplementing the procedural courses and, in particular, the course in Practice and Procedure, the College of Law conducts a Practice Court under the instruction and direct supervision of a member of the faculty. Its primary purpose is to give the students practical experience in coordinating and applying, in an actually litigated case, the legal knowledge which they have acquired in their classroom courses. The cases are tried exactly as they would be tried

in an ordinary court. The first session is presided over by Professor Carlin, who has charge of the course in Practice Court, and the other sessions are presided over by a judge of the Supreme Court of Appeals or of one of the circuit courts of West Virginia.

The court exercises original jurisdiction in law and equity, and appellate jurisdiction in appeals from inferior tribunals. Statements of facts are furnished, such as would be related to a lawyer in active practice by his client. Each student must determine whether or not upon such facts the particular case in hand is one of common law or equity. He must then frame his pleadings, serve his summons or notice, and answer his adversary's pleadings until issue is joined in legal manner. Thereupon the case is brought on for trial or hearing in strict accordance with legal procedure, witnesses are examined and cross-examined, and the case is conducted through all the various stages of trial or hearing down to and including the judgment, decree, or sentence; after which, should the case be appealed, it must be carried through the Supreme Court, involving the preparation of the record on appeal, briefs of counsel, and argument.

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF LAWS

The degree of Bachelor of Laws is conferred upon those who have met the requirements for entrance to the College of Law as candidates for this degree and who have satisfactorily passed examinations in courses aggregating eighty-one credit hours, distributed over three years' residence, and who have obtained an average grade of C[1] as hereinafter provided. Except with the permission of the Scholarship Committee these eighty-one hours must be taken in no more than six semesters or the equivalent thereof in summer school, and the last twenty-seven hours of work must be taken in the College of Law of West Virginia University. When a student, because of admission with advanced standing from another law school, needs less than eighty-one hours in order to satisfy the requirements for this degree, the C average required for graduation is computed on the basis of work taken in the College of Law. No student may receive the degree of Bachelor of Laws without at least three semesters in residence at the College of Law and the successful completion of courses aggregating at least one-half of the total number of hours required for graduation.

GENERAL REGULATIONS

Written examinations are held at the end of each semester in all courses. Reports of students' grades are made at the end of each semester.

All courses extend either through the entire year or through one semester. No credit will be given for less than an entire course except by special order of the Committee on Scholarship. A grade given at the end of the first semester in a course extending throughout the year does not carry credit, but such first-semester grade may be considered in determining the final grade.

[1]The C average requirement does not apply to students who entered before the fall of 1939. For rules governing such students see the Law School Bulletin for 1938-39.

Final grades are based primarily on the written examinations. But in determining a grade the instructor may give such weight as he deems best to daily recitations or other classroom assignments. He may refuse examination to any student because of poor attendance.

No student who absents himself from any regular examination without being excused therefrom by the faculty of the College of Law will receive credit unless he successfully repeats the course. If absence from a final examination is permitted by the faculty, the student's grade in that course will be withheld until he has passed the next regular examination in the course. Application for leave to be absent from a regular examination must be made before the hour at which such examination closes.

To be graduated, a student must obtain an average grade of C, computed on the basis of all work taken during the first three years or on the basis of the first 81 hours, if the student has not taken the required 81 hours during the first three years.[2]

A student who at the end of the third or any subsequent semester has a grade of D or less in more than half his work, computed on the basis of the total number of hours which he has taken, shall be excluded permanently from the College of Law.[2]

A student who fails to pass more than half his work, computed on the basis of hours carried during any semester, shall be suspended. Upon application to the Scholarship Committee, a student so suspended, unless excluded under the preceding rule, may be readmitted, but with the understanding that if he again fails to pass half his work he shall be excluded permanently from the Law School.

Unless previously excluded on account of poor scholarship, a student who has received a grade of D in any course is privileged to take the next regular examination in that course for the purpose of raising his grade. No special examinations will be given under this rule.

Students in Other Colleges

Students of at least senior standing in other colleges of the University may be permitted to take work in the College of Law subject to the regulations of the colleges where they are registered and of the College of Law, but conditioned in each case upon the consent of the instructor giving the course which such students desire to take.

ADMISSION TO THE BAR

Under the provisions of the West Virginia Code 1931, ch. 30, art. 2, sec. 1, those who receive the degree of Bachelor of Laws from West Virginia University may be admitted to the bar without further examination.

All persons seeking admission to the West Virginia bar, except those who hold the degree of Bachelor of Laws from West Virginia University, are required to pass the state bar examination.

[2]This rule does not apply to students who entered before September, 1939. For rules governing such students see the Law School Bulletin for 1938-39.

Information as to bar examinations and as to other matters relating to admission to the bar may be obtained upon inquiry directed to the Secretary, State Board of Law Examiners, Charleston, West Virginia.

THE WEST VIRGINIA LAW QUARTERLY

The West Virginia Law Quarterly is published in December, February, April, and June by the College of Law. It is the official publication of the West Virginia Bar Association.

The editors of the Student Note and Recent Case Department of the Law Quarterly are members of the second and third-year classes, chosen each year from those students who made the highest grades in the preceding year. This department affords to students an opportunity to do research work of a practical nature.

The School of Medicine

INSTRUCTION IN MEDICINE

Regular instruction in subjects preparatory to the study of medicine was first given in West Virginia University in 1871, the chair of anatomy, physiology, and hygiene having been established in that year. A curriculum covering the first two years of a standard four-year medical course was provided in 1902, and the work was placed in charge of the College of Medicine with a resident faculty of six men. In 1912 the College of Medicine became the School of Medicine. In reorganizing the work in medicine the Board of Regents retained the general character of the curriculum previously offered but provided for a larger faculty, more laboratories, and more adequate equipment.

Only the first two years of medicine are given in West Virginia University. The School has no affiliations with any other Medical School. Upon the satisfactory completion of the two years given, students may transfer to various other medical schools to complete their medical education.

The School of Medicine is listed as a Recognized School of Basic Medical Sciences by the Council on Medical Education and Hospitals of the American Medical Association. It is also a member of the Association of American Medical Colleges.

The Standing Committees

EXECUTIVE: Messrs. VAN LIERE, DODDS, and PRIDE.
ENTRANCE AND SCHOLARSHIP: Messrs. DODDS, CHANDLER, EMERSON, FENTON, and MACLACHLAN.
LIBRARY: Messrs. CHANDLER, DODDS, EMERSON, NORTHUP, and SPRAY.
RESEARCH: Messrs. VAN LIERE, EMERSON, GODWIN, NORTHUP, and SPRAY.
SEMINARS: Messrs. DODDS, DEANGELIS, MACLACHLAN, NORTHUP, and STICKNEY.
CLINICAL AND SPECIAL FACILITIES: Messrs. PRIDE, FENTON, and MAXWELL.

The John N. Simpson Lectureship

In 1933 the West Virginia chapter of the Phi Beta Pi medical fraternity instituted the John Nathan Simpson Lectureship, honoring Dr. John N. Simpson, now Dean Emeritus of the School of Medicine, giving an annual lecture by some one distinguished in medical research or practice.

REQUIREMENTS FOR DEGREES

The School of Medicine gives no degrees in medicine, inasmuch as only the first two years of medicine are given. It, however, cooperates with the College of Arts and Sciences in granting the Bachelor of Science degree, upon the completion of the two years of medical work, to those students who comply with certain requirements of the College of Arts and Sciences.

A suggested curriculum for Pre-Medical students is given on page 111 of this Catalogue.

THE MEDICAL CURRICULUM

The following courses and hours are required or all medical students. The length of the semester is 17 weeks including the final examination periods.

THE SCHEDULE OF COURSES

COURSES	Hours Per Week			Hours Per Semester			Semester Hours of Credit
	Lect.	Lab.	Total	Lect.	Lab.	Total	
FIRST YEAR—FIRST SEMESTER							
Gross Anatomy 201	2	12	14	34	204	238	7
Histology 201	2	7	9	34	119	153	5
Biochemistry 201	3	9	12	51	153	204	6
FIRST YEAR—SECOND SEMESTER							
Bacteriology 202	2	8	10	34	136	170	5
Embryology 202 (1st half sem.)	4	7	11	34	59	93	3
Neurology 203 (2nd half sem.)	4	7	11	34	59	93	3
Gross Anatomy 202	1	8	9	17	136	153	4
Physiology 202	2	3	5	34	51	85	3
SECOND YEAR—FIRST SEMESTER							
Pathology 201	5	11	16	85	187	272	8
Physiology 203	5	6	11	85	102	187	7
Pharmacology 202	3	---	3	51	---	51	3
Public Hygiene 203	2	---	2	34	---	34	2
SECOND YEAR—FIRST HALF OF SECOND SEMESTER							
Pharmacology 203	5	9	14	42	76	118	4*
Applied Anatomy 204	2	6	8	17	51	68	2*
Obstetrics 201	4	---	4	34	---	34	2*
History of Medicine 203	1	---	1	8	---	8	0*
Clinical Pathology 203	1	2	3	8	17	25	†
Physical Diagnosis 201	2	2	4	17	17	34	†
Medicine 202	1	---	1	8	---	8	†
Surgery 201	2	---	2	17	---	17	†

*Course completed at mid-semester.

†Course continues throughout the semester.

SECOND YEAR—SECOND HALF OF SECOND SEMESTER							
Clinical Pathology 203 (Cont.)	1	10	11	8	85	93	3
Physical Diagnosis 201 (Cont.)	2	2	4	17	17	34	3
Medicine 202 (Cont.)	3	2	5	25	17	42	2
Surgery 201 (Cont.)	3	2	5	25	17	42	3
Special Pathology 202	---	5	5	---	42	42	1

COURSES OF INSTRUCTION

(For explanation of abbreviations see page 81)

NOTE—Courses marked "[1]" are required of first-year students; those marked "[2]" are required of second-year students.

In addition to the required courses there are listed some elective courses. These are for the benefit of the occasional advanced student who may need them. These courses are given only when, in the opinion of the department concerned and of the dean, it is considered advisable.

On the following pages those staff members who are designated by the title "Dr." have the M. D. degree. All others, most of whom have the Ph. D. degree, are designated as "Mr." in accordance with the custom in University publications.

Gross Anatomy and Neurology

Professor CHANDLER; Assistant Professor GODWIN; Instructor SCHADEWALD

201.[1] **Gross Anatomy.** I. 7 Hrs. Lectures and recitations, 2 hours per week; laboratory, 12 hours per week. PR: Zoology; comparative anatomy desirable. Staff

202.[1] **Gross Anatomy.** II. 4 Hrs. Continuation of Anatomy 201. Lecture, 1 hour per week; laboratory, 8 hours per week. PR: Anatomy 201. Staff

203.[1] **Neurology.** II. 3 Hrs. Lectures, 4 hours per week; laboratory, 7 hours per week. Second half of semester. PR: Histology 201, Anatomy 201. Staff

204.[2] **Applied Anatomy.** II. 2 Hrs. Lectures, 2 hours per week; laboratory, 6 hours per week. First half of semester. PR: Anatomy 201 and 202, Neurology 203, and Embryology 202. Dr. Chandler

211. **Anatomy of the Sympathetic Nervous System.** I or II. 2-5 Hrs. Hours to be arranged. Open to properly qualified students. Dr. Chandler

212. **Applied Anatomy of the Pelvis and Perineum.** I or II. 2-5 Hrs. Hours to be arranged. Open to properly qualified students. Staff

381. **Advanced Anatomy.** 2-5 Hrs. Hours to be arranged. Open to properly qualified students. Dr. Chandler

Histology and Embryology

Professor DODDS; Assistant Professor GODWIN

201.[1] **Histology.** I. 5 Hrs. Lectures, 2 hours per week; laboratory, 7 hours per week. PR: Zoology, Anatomy 201 or acceptable substitute. Staff

202.[1] **Embryology.** II. 3 Hrs. Lectures, 4 hours per week; laboratory, 7 hours per week. First half of semester. PR: Histology 201 and Anatomy 201. Staff

211. **The Histology and Development of the Skeletal System.** I. or II. 2-5 Hrs. Hours to be arranged. Open to properly qualified students. Laboratory work and study of current literature. Mr. Dodds

213. **Advanced Embryology.** I or II. 2-5 Hrs. With special emphasis on early stages of development. Hours to be arranged. Open to properly qualified students. Mr. Godwin

381. **Research in Microscopic or Developmental Anatomy.** I. or II or Yr. 2-5 Hrs. Hours to be arranged. Elective. Open to properly qualified students. Staff

Biochemistry

Associate Professor RAFFERTY; Assistant Professor MACLACHLAN

239. **General Biochemistry.** II. 4 Hrs. Fundamental biochemistry of both animals and plants. PR: Chemistry 31, 36, or 233. Lecture, 2 hours; laboratory, 6 hours per week. Graduate students required to do one hour additional work per week for 4 hours' credit. Staff

201.[1] **Biochemistry.** I. 6 Hrs. Lecture, 3 hours per week; laboratory, 9 hours per week. PR: inorganic and organic chemistry, quantitative analysis, and zoology. Staff

211. **Chemistry of Carbohydrates, Fats and Proteins.** I. 5 Hrs. Lecture, 2 hour per week; laboratory, 6 hours per week. PR: inorganic chemistry, organic chemistry, and qualitative analysis. Staff

212. **Chemistry of Digestion, Metabolism, and Excretion.** II. 5 Hrs. Lecture, 2 hours per week; laboratory, 6 hours per week. PR: inorganic chemistry, organic chemistry, and qualitative analysis. Staff

213. **Quantitative Method of Urine and Blood Analysis.** II. 5 Hrs. Lecture, 2 hours per week; laboratory, 6 hours per week. Open to properly qualified students. Dr. Rafferty

214. **Biochemical Preparations.** I or II. 3 Hrs. Dr. Rafferty

215. **Biochemical Preparations.** I or II. 3 Hrs. Dr. Rafferty

381. **Research in Biochemistry.** I or II or Yr. 2-5 Hrs. Open to properly qualified students. Staff

Bacteriology and Public Hygiene

Professor SPRAY; Instructor STANLEY

101. **Pathogenic Bacteriology.** I. 5 Hrs. Required of Pharmacy students. Open to other qualified students. Lecture, 2 hours per week; laboratory, 8 hours per week. PR: Organic chemistry. Mr. Stanley

202.[1] **Medical Bacteriology.** II. 5 Hrs. Lecture, 2 hours per week; laboratory, 8 hours per week. PR: Biochemistry 201. Staff

203.[2] **Public Hygiene.** I. 2 Hrs. Lecture, 2 hours per week. PR: Bacteriology 202. Mr. Spray

211. **Advanced Bacteriology.** I or II. 2-5 Hrs. Hours to be arranged. Open to graduates and advanced students. Mr. Spray

381. **Research in Bacteriology.** I or II. 2-5 Hrs. PR: Bacteriology 202 or equivalent. Mr. Spray

Physiology

Professor VAN LIERE; Associate Professor NORTHUP; Instructor STICKNEY

101. **Elementary Physiology.** II. 4 Hrs. For pharmacy students. Lecture, 3 hours per week; laboratory, 3 hours per week.
Mr. Northup and Mr. Stickney

202.[1] **Physiology.** II. 3 Hrs. Physiology of muscle and nervous system. Lecture, 2 hours per week; laboratory 3 hours per week. PR: Biochemistry 201 and Histology 201. Staff

203.[2] **Physiology.** I. 7 Hrs. Physiology of circulation, respiration, digestion, metabolism, secretion, endocrines, and special senses. Lecture, 5 hours per week; laboratory, 6 hours per week. PR: Physiology 202; Anatomy 201 and 202, and Neurology 202. Staff

211. **Seminar in Physiology.** Yr. No credit Staff

212. **Advanced Physiology of Circulation and Respiration.** Yr. 2-5 Hrs. Hours to be arranged. Dr. Van Liere

213. **Physiology of Gastro-intestinal System.** II. 2-5 Hrs. Hours to be arranged. Dr. Van Liere

214. **Nervous Physiology and Special Senses.** Yr. 2-5 Hrs. Hours to be arranged. Mr. Northup

381. **Physiology.** I or II. 2-5 Hrs. Research in Physiology leading to the Master of Science degree. Staff

Pathology

Professor FENTON; Assistant Professor DEANGELIS

201.[2] **General and Tumor Pathology.** I. 8 Hrs. Lecture, 5 hours per week; laboratory, 11 hours per week. Demonstrations. PR: Biochemistry 201. Physiology 202, Anatomy 201 and 202, and Bacteriology 201. Staff

202.[2] **Special Pathology.** II. 1 Hr. Second half of semester: Lecture, 1 hr. per week; laboratory, 4 hrs. per week. A study of special diseases, with gross and microspic specimens from selected autopsies. Staff

203.[2] **Clinical Pathology.** II. 3 Hrs. A laboratory course in blood, gastric contents, etc., and their pathological and clinical significance. Lecture. 1 hour per week throughout the semester; laboratory, first half of semester, 2 hours per week; second half, 10 hours per week. Staff

211. **Pathology (Special).** I or II. 3 Hrs. Microscopic and gross specimens from selected autopsies. PR. Pathology 201. Staff

381. **Experimental Pathology.** I or II. 2-5 Hrs. Hours to be arranged. Open to properly qualified students. Dr. Fenton

Pharmacology

Associate Professor EMERSON; Instructor MORRISON; Lecturer TUCKER

202.[2] **Medical Pharmacology.** I. 3 Hrs. Lecture, 3 hours per week. PR: Physiology 202. Mr. Emerson

203.[2] **Medical Pharmacology and Pharmacodynamics.** II. 4 Hrs. First half of the semester: lecture, 5 hours per week; laboratory, 9 hours per week. PR: Pharmacology 202. Staff

211. **Biochemorphology.** II. 2 Hrs. Lecture, 2 hours per week. Relation between chemical constitution and physiological action of medical agents. PR: Pharmacology 202, or Chemistry 233 and 239. Staff

212. **Bioassay and Comparative Pharmacology.** I and II. 3 Hrs. Lectures and demonstrations, 2 hours per week; laboratory, 3 hours per week. Cellular pharmacodynamics and comparative mammalian pharmacology. PR: Pharmacology 202; or Chemistry 233 or 239 and Histology 201, or Pharmacy 110. Staff

213. **Introductory Therapeutics.** II. 1 Hr. Lecture, 2 hours per week. Second half of semester. PR: Pharmacology 202. Mr. Emerson

214. **Anesthesiology.** II. 3 Hrs. Lecture, 2 hours per week, laboratory, 3 hours per week. PR: Physiology 202. Staff

381. Research in Pharmacology. I and II. 2-5 Hrs. Hours to be arranged. PR: Graduate status in physiology, chemistry, or agriculture.
Mr. Emerson

Medicine

Associate Professor WHITTLESEY,* Assistant Professors MAXWELL and SUMMERS; Instructors CADDEN and SALKIN; Lecturer SIMPSON

201.[2] Physical Diagnosis. II. 3 Hrs. First half of semester: lecture, 2 hours per week; laboratory, 2 hours per week; second half of semester: lecture, 2 hours per week; practical work with patients, 2 hours per week. Hospital clerkship at Hopemont Sanitarium one week. Staff

202.[2] Medicine. II. 2 Hrs. First semester: demonstration of clinical cases, 1 hour per week. Second semester, first half: lecture, 1 hour per week; second half: lecture, 3 hours per week, demonstration of clinical cases 2 hours per week. Medical problems are also considered in the clerkship at Hopemont Sanitarium. Staff

203.[2] History of Medicine. II. No Cr. A brief history of the development of medicine. Dr. Simpson

Introductory Surgery

Assistant Professor PRIDE

201.[2] Principles of Surgery. II. 3 Hrs. First half of semester: lecture, 2 hours per week; second half of semester: lecture, 3 hours per week; demonstrations of clinical cases and operative technique, 2 hours per week. PR: Anatomy 201 and 202. Applied Anatomy to be taken concurrently.

Obstetrics

Professor VAN LIERE

201.[2] Obstetrics. II. 2 Hrs. An introductory course in obstetrics. First half of semester: lecture, 4 hours per week. PR: Anatomy 201 and 202, Physiology 202 and 203 and Pathology 201.

* Resigned September 1, 1940.

The Division of Military Science and Tactics

Professor Orton; Assistant Professors Shelton and Wilson; Instructors Case, Williams, Dawson, and Highland; Assistants Young, Siddons, McClung, Tuttle, Chisman, and Ramsey

Basic—First Year

1. **Military Science.** 1 Hr.
INFANTRY: Leadership, rifle marksmanship, sanitation and first aid, organization of the Army, obligations of citizenship.
ENGINEERS: Leadership, rifle marksmanship, sanitation and first aid, organization of the Army, obligations of citizenship.

2. **Military Science.** 1 Hr.
INFANTRY: Military history and policy, map reading, organization of Infantry, leadership.
ENGINEERS: Military history and policy, map reading, organization of Engineers and other branches, duties of Engineers, leadership.

Basic—Second Year

3. **Military Science.** 2 Hrs.
INFANTRY: Leadership, scouting and patrolling, automatic rifle, characteristics of infantry weapons.
ENGINEERS: Leadership, scouting and patrolling, weapons and musketry, map reading, military sketching.

4. **Military Science.** 2 Hrs.
INFANTRY: Musketry, combat principles for the squad, leadership.
ENGINEERS: Map making, aerial photograph reading, rigging, leadership.

Advanced—First Year

105. **Military Science.** 3 Hrs.
INFANTRY: Leadership, machine guns, Infantry weapons, administration, care and operation of motor vehicles, defense against chemical warfare, aerial photography, estimate of situation and orders.
ENGINEERS: Leadership, military roads, military bridges, administration, defense against chemical warfare, military explosives, military demolitions.

106. **Military Science.** 3 Hrs.
INFANTRY: Marches, security, combat, combat principles, rifle marksmanship, pistol, field fortifications, leadership.
ENGINEERS: Field fortifications, combat orders, combat principles, preparation for ROTC camp marksmanship, leadership.

Advanced—Second Year

107. **Military Science.** 3 Hrs.
INFANTRY: Leadership, combat principles of platoon, tanks, antitank defense, Infantry signal communications, combat intelligence.
ENGINEERS: Leadership, military bridges, combat platoon and company, combat principles of Infantry.

108. Military Science. 3 Hrs.

INFANTRY: Combat principles, military law, military history and policy, mechanization, property and funds, O. R. C. regulations, leadership.

ENGINEERS: Combat principles of Engineers, organization of the ground, supply, mess management, military law, military history and policy, property and funds, O. R. C. regulations, leadership.

The School of Music

BUILDINGS AND EQUIPMENT

The School of Music is situated in two buildings. One contains two studios, three studio-classrooms, and six practice rooms, and the other contains the office, two studios, four practice rooms, one classroom, and the locker-room.

The equipment consists of 19 upright and ten grand pianos, a new Hammond organ, and a three-manual pipe-organ, recently modernized to conform to all requirements of the American Guild of Organists. The pipe-organ is situated in Reynolds Hall, and the Hammond organ in the School of Music.

STUDENT CONCERTS

Students giving satisfactory performances appear in recital. The object is to afford opportunity for the students to apply in public the proficiency that has been developed in the studio.

All music students are required to attend the regular student recitals, to take part in them whenever so assigned, and to attend all concerts given under the auspices of the University. They are expected to identify themselves with the various organizations of the school and are required to enter any to which they are assigned by the Director.

Students of the School of Music are not allowed to take part in public programs or to join musical organizations without the consent of their respective instructors and the Director of the school.

THE STANDING COMMITTEES

SCHOLARSHIP: Messrs. CUTHBERT and SHEPARD and Miss HINKEL.
CONCERTS AND RECITALS: Messrs. CUTHBERT, SHEPARD, WOOD, and MCGREGOR.

REQUIREMENTS FOR THE DEGREE

The School of Music offers a four-year curriculum in voice, violin, piano, pipe-organ, and public-school music, leading to the degree of Bachelor of Music (B. Mus.).

The Bachelor of Music degree is conferred upon any student who complies with the general regulations of the University concerning degrees, satisfies all entrance and departmental requirements, and completes one of the following curricula in applied music (136 hours) with an average of one honor point per credit-hour:

A. Piano, violin, or pipe organ
B. Voice
C. Public-school music

The Suggested Curriculum in Applied Music

Leading to the Degree of Bachelor of Music in

PIANO, VIOLIN, OR PIPE ORGAN

FIRST YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Major	3	Major	3
Minor	1	Minor	1
M 72 Introd.	2	M 75 Ear train.	5
M 73 Sight read.	5	M 79 Appreciat.	3
Glee Club, Orch., or Chorus	1	Glee Club, Orch., or Chorus	1
English 1	3	English 2	3
Phys. educ.[2]	1	Phys. education	1
	16		17
Mil. sci. (men)[1]	1	Mil. sci. (men)[1]	1
	17		18

SECOND YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Major	3	Major	3
Minor	1	Minor	1
M 1 Harmony	5	M 2 Adv. harm. and Analysis	5
Glee Club, Orch., or Chorus	1	Glee Club, Orch., or Chorus	1
English 3	3	English 4	3
Pub. speak.	3	French, German, or Italian	3
Phys. ed. (W)	1	Phys. ed. (W)	1
	(W.) 17		(W.) 17
Mil. sci. (men)[1]	2	Mil. sci. (men)[1]	2
	(M.) 18		(M.) 18

THIRD YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Major	3	Major	3
Minor	1	Minor	1
M 109 Introd. Counterpoint	3	M 110 Count'p't	3
M 115 Key-harm. & sight playing	3	M 116 Key-harm. & sight playing	3
M 153 Ensemble	1	M 154 Ensemble	1
M 180 Appre't'n	3	M 182 (183) Conducting	2
French, German, or Italian	3	French, German, or Italian	3
		Public speaking	3
	17		19

FOURTH YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Major	3	Major	3
Minor	1	Minor	1
M 111 Double Counterpoint	3	M 114 Composition	2
M 113 Comp't'n	2	M 118 Orchestration	3
M 117 Orchestr.	3	M 156 Ensemble	1
M 155 Ensemble	1	M 199 Grad. recital	2
M 240 History	3	M 241 History	3
	16		15

[1]See footnotes on next page.

The Suggested Curriculum in Applied Music

Leading to the Degree of Bachelor of Music in

VOICE

FIRST YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Voice	3	Voice	3
Piano	1	Piano	1
M 72 Introd.	2	M 75 Ear train.	5
M 73 Sight read.	5	M 79 Appreciat.	3
Glee Club or Chorus	1	Glee Club or Chorus	1
English 1	3	English 2	3
Phys. educ.[2]	1	Phys. educ.[2]	1
	16		17
Mil. sci. (men)[1]	1	Mil. sci. (men)[1]	1
	17		18

SECOND YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Voice	3	Voice	3
Piano	1	Piano	1
M 1 Harmony	5	M 2 Adv. harm. and Analysis	5
Glee Club or Chorus	1	Glee Club or Chorus	1
English 3	3	English 4	3
French, German, or Italian	3	French, German, or Italian	3
Phys. ed. (W)	1	Phys. ed. (W)	1
(W.)	17	(W.)	17
Mil. sci. (men)[1]	2	Mil. sci. (men)[1]	2
(M.)	18	(M.)	18

THIRD YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Voice	3	Voice	3
Piano	1	Piano	1
M 109 Introd. Counterpoint	3	M 110 Count'p't.	3
M 180 Appre't'n	3	M 182 Choral Conducting	2
French, German, or Italian	3	French, German, or Italian	3
Public Speaking	3	Public speaking	3
Glee Club or Chorus	1	Glee Club or Chorus	1
	17		16

FOURTH YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Voice	3	Voice	3
Piano	1	Piano	1
M 113 Introd. Composition	3	M 114 Comp't'n	3
M 183 Instr. conduct. and score reading	2	M 199 Graduate Recital	2
M 240 History	3	Glee Club or Chorus	1
M 281 Appre't'n	2	M 241 History	3
French, German, or Italian	3	French, German, or Italian	3
Glee Club or Chorus	1		
	18		16

[1]Military science is required of all male students except those who at the time of matriculation are 23 years of age or have completed no less than 58 hours of work, and all who have credit for 4 hours of military science or 1 unit of entrance credit in military academy. Students must register for military science upon their entrance into the University and continue in the course until the full requirement has been met or until a regular exemption card is filed in the Registrar's office.

[2]Two hours of physical education for men, to be taken during the first year of residence, and four hours of physical education for women, to be taken during the first and second years in residence, are required for graduation of students presenting fewer than 58 semester hours, unless previous credit has been allowed.

The Suggested Curriculum in Public-School Music

Leading to the Degree of Bachelor of Music in PUBLIC-SCHOOL MUSIC

FIRST YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Piano	2	Piano	2
M 72 Introd.	2	Public Speaking	2
M 73 Sight read.	5	M 75 Ear Train.	5
Glee Club, Orchestra, Band, or Chorus	1	Glee Club, Orchestra, Band, or Chorus	1
English 1	3	English 2	3
Sci. or math.	3	Sci. or math.	3
Phys. educ.[2]	1	Phys. educ.	1
	17		17
Mil. sci. (men)[1]	1	Mil. sci. (men)[1]	1
	18		18

SECOND YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Piano	2	Piano	2
M 1 Harmony	5	M 79 Appreciat.	3
Glee Club, Orchestra, Band, or Chorus	1	Instru. class	1
English	2	Glee Club, Orchestra, Band, or Chorus	1
Second field or electives	6	Social studies	3
Phys. ed. (W)	1	Second field or electives	6
		Phys. ed. (W)	1
(W.)	17		
Mil. sci. (men)[1]	2	(W.)	17
		Mil. sci. (men)[1]	2
(M.)	18	(M.)	18

THIRD YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Voice	2	Voice	2
M 180 Appre't'n	3	M 182 or 183 Conducting	2
Instru. class	1	Instru. class	1
Glee Club, Orchestra, Band, or Chorus	1	Glee Club, Orchestra, Band, or Chorus	1
Social studies	3	Social Studies	3
Second field or electives	3	Second field or electives	3
Educ. 106	3	Educ. 112	2
Educ. 109	2	Educ. 214	2
		Educ. elective	2
	18		18

FOURTH YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Voice	2	Voice	2
Instru. class	1	Instru. class	1
Glee Club, Orchestra, Band, or Chorus	1	Glee Club, Orchestra, Band, or Chorus	1
M 185 P.S.M. and Adoles. Voice	3	Health	2
M 240 History	3	Educ. 169	2
Social studies	3	Educ. 120	2
Second field or electives	4	Educ. 224	3
		Educ. elective	2
17		15	

All students majoring in Public-School Music must meet the general academic and professional requirements for all high-school teachers as prescribed in State Bulletin for Certification of Teachers, in addition to the School of Music degree requirements.

Subject to the approval of the Director of the School of Music, Public-School Music may be chosen as a single teaching field.

Candidates for certification in music may be recommended for certification in one field with an upper limit of 68 hours in music and with no fewer than 47 hours distributed in cultural subjects other than Education.

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[1]Military science will not be accepted as physical education. Women may meet the four-hour physical education activity requirement by taking P. E. 1, 2, 3, and 4; men may meet it by taking P. E. 1, 2, and 178.

[2]Two hours of physical education for men, to be taken during the first year of residence, and four hours of physical education for women, to be taken during the first and second years in residence, are required for graduation of students presenting fewer than 58 semester hours, unless previous credit has been allowed.

THE COURSES OF INSTRUCTION

(For explanation of abbreviations see page 81)

Theory of Music and General Courses*

Professor CUTHBERT; Associate Professor HINKEL; Assistant Professors WOOD and SHEPARD; Instructors MOORE, SNEE, MCGREGOR, and MCWHORTER; Assistants ROSE and HOSKINS

1, 101. Harmony. I. 3 or 5 Hrs. PR: Knowledge of fundamentals of reading, rhythm, and terminology. The structure of music: intervals, scales, triad formations, inversion, chords of dominant seventh and ninth, etc. Harmonization of melodies and figured basses. Mr. Wood

2, 102. Advanced Harmony and Analysis. II. 3 or 5 Hrs. PR: Music 1. Modulations; employment of altered and mixed chords; study and practice in the writing of chorals; accounting for chords and foreign tones which make up the harmonic structure. Mr. Wood

72. Introduction to Music. I, II. 2 Hrs. Fundamentals of reading, rhythm, and theory; terminology. Mr. McGregor

73. Sight Reading. I. 3 or 5 Hrs. Study and practice in reading music. Miss Hinkel

75. Ear Training and Dictation. II. 3 or 5 Hrs. Rhythmic and melodic dictation. Miss Hinkel

77. Enjoyment of Music. I, II. 1 Hr. A non-technical course dealing with the elements of music-rhythm, timbre, form, harmony, melody, etc. Not open to music majors. Mr. Shepard and Mr. Wood

79. Appreciation. II. 3 Hrs. General survey of musical literature, with critical evaluations. Miss Hinkel

109. Introductory Counterpoint. I. 3 Hrs. Association of two-tone lines in the first four species. Mr. Hoskins

110. Counterpoint. II. 3 Hrs. Rhythmic diversity, etc.; the two and the three-voice invention. Mr. Hoskins

111. Double Counterpoint, Canon, and Fugue. I, II. 3 Hrs. Artificial double counterpoint, and structure of various kinds of canon and fugue. Mr. Hoskins

113. Introductory Composition. I. 2 Hrs. PR: Theory 1 and 2. Practice in writing original phrases, periods, and double periods. Mr. Shepard

114. Composition. II. 2 Hrs. PR: Theory 113. Continuation of original writing including the song forms. Mr. Shepard

115. Keyboard Harmony and Sight Playing. I. 3 Hrs. Playing of triads, fundamental and inverted positions, modulation and transposition of simple hymn forms; including rhythmic scale work and study of varied compositions. Staff

116. Keyboard Harmony and Sight Playing. II. 3 Hrs. Continuation of Music 115. Staff

117. Orchestration. I. 3 Hrs. PR: Theory 1 and 2. Arrangements for string orchestra. Projects selected from choral and piano compositions. Elements of wood winds. Mr. Wood

118. Orchestration. II. 3 Hrs. PR: Theory 117. Arrangements for wood winds and brasses, in separate groups and ensemble. Mr. Wood

180. Appreciation. I. 3 Hrs. Operatic music. Miss Hinkel

*No additional fees are charged for theory-of-music and general courses.

182. **Choral Conducting.** I, II. 2 Hrs. The conductor's art in the choral field, including practical experience in conducting choral groups. Miss Hinkel

183. **Instrumental Conducting and Score Reading.** I, II. 2 Hrs. The conductor's art in the instrumental field, including score reading and practical experience in conducting instrumental groups. Mr. McGregor

185. **Public-School Music and Adolescent Voice.** I, II. 3 Hrs. Essentials of public-school music, including the study of changing voice. Miss Hinkel

Men's Glee Club. I, II. 1 Hr. each semester. Mr. Cuthbert

Women's Glee Club. I, II. 1 Hr. each semester. Miss Hinkel

University and Community Orchestra. I, II. 1 Hr. each semester. Mr. Wood

University and Community Mixed Chorus. I, II. 1 Hr. per semester. Mr. Cuthbert

Band. I, II. 1 Hr. per semester. Open to male students who have satisfied the basic military requirement and have been approved by the director of the Band. Mr. McGregor

200s. **Band, Orchestra, and Chorus Clinic.** 2 Hrs. Special problems of organization and development, including literature, rehearsal technique, drilling, tuning, and motivation of student practice. Lecture and discussion groups. This clinic will function along with laboratory groups of high-school students. Staff

240. **History of Music.** I. 3 Hrs. Survey of the progress of music history from medieval times to the end of the classical-school period. Mr. Wood

241. **History of Music.** II. 3 Hrs. Continuation of Music 240, including the romantic and modern schools. Mr. Wood

281. **Appreciation.** I, II. 2 Hrs. Symphonic and chamber music. Miss Hinkel

Professor CUTHBERT; Instructor MCGREGOR; Assistant MCWHORTER

Voice

Professor CUTHBERT; Instructors MCGREGOR and MCWHORTER; Assistant ROSE

The material used is selected according to individual needs and ability. Vocalises; English, Italian, French, and German song literature; arias from standard operas and oratorios. Before graduation each student is required to give a public recital of selections chosen from the standard literature for the voice.

199. **Graduation Recital.** I, II. 2 Hrs. (Required for degree).

Piano

Assistant Professor SHEPARD; Instructors MOORE, SNEE, and MCWHORTER; Assistant HOSKINS

The material used is selected according to individual needs and ability. Technical studies, etudes, and standard compositions of Bach, Mozart, Haydn, Beethoven, Shubert, Schumann, Chopin, Liszt, Brahms, Debussy, Dohnanyi, Scriabine, etc. Before graduation each student is required to give a public recital.

199. **Graduation Recital.** I, II. 2 Hrs. (Required for degree).

Violin

Assistant Professor WOOD

The material used is selected according to individual needs and ability. Technical studies by Schradieck, Sevcik, etc. Solos and concertos by Wieniawski, Vieuxtemps, Sarasate, Viotti, Spohr, Mozart, etc. Before graduation each student is required to give a public recital of compositions chosen from the standard literature for the violin, including concertos of Bruch, Mendelssohn, Conus, Paganini, etc.

199. Graduation Recital. I, II. 2 Hrs. (Required for degree).

Pipe Organ

Instructor SNEE

The material used is selected according to individual needs and ability. Technique; standard works of Bach, Mendelssohn, Guilmant, Hollins, etc. Before graduation each student is required to give a public recital of compositions chosen from the standard literature for the pipe-organ.

199. Graduation Recital. I, II. 2 Hrs. (Required for degree).

Band and Orchestra Instruments

Assistant Professor WOOD and Instructor MCGREGOR

Individual lessons; standard methods; materials selected to meet individual needs and ability.

199. Graduation Recital. I, II. 2 Hrs. (Required for degree).

Ensemble

Professor CUTHBERT and Assistant Professor WOOD

153, 154. Accompanying. I and II. 1 Hr. per semester. The course furnishes opportunity to acquire the art of accompanying songs and violin and cello solos.

155, 156. Chamber Music. I and II. 1 Hr. per semester. The study of sonatas, trios, and string quartettes of the most famous composers. Open to violinists, cellists, pianists, and viola players.

Instrument Classes[1]

Assistant Professor WOOD and Instructor MCGREGOR

191. Trombone. I, II. 1 Hr. Study of the trombone. Tone production, simple exercises and scales, easy pieces, positions of the slide trombone, and their relationship. Literature of brass instruments.

192. Cornet. I, II. 1 Hr. Study of the cornet. Tone production, simple exercises and scales, easy pieces, fingering of cornet. Literature of brass instruments.

193. Clarinet. I, II. 1 Hr. Study of the clarinet. Boehm system. Tone production, simple scales and exercises.

[1]Students may use their own instruments, or instruments may be rented for a fee of $2.50 per semester.

194. **Violin.** I, II. 1 Hr. Study of the violin. Scales, simple pieces, exercises, positions, tuning, etc.

195. **Flute.** I, II. 1 Hr. Study of the flute. Boehm system. Tone production, simple scales, and exercises.

196. **Viola and Cello.** I, II. 1 Hr. Study of the viola and cello. Scales, simple pieces, exercises, positions, tuning, etc.

Graduate Courses

Candidates for the Master's degree in Music are required to have completed the prescribed four-year curriculum of undergraduate study in Music, or to have completed such a curriculum, or its equivalent, at some institution of recognized standing.

Each candidate for a degree must select his major subject in that department of Music in which his degree is to be taken, and submit a thesis showing marked attainment in some phase of this subject.

All Music courses leading toward the Master's degree in Music must be chosen from the 300 series in Music. However, elective courses may be chosen from the 200 or 300 series.

301. **Advanced Applied Music.** I. 2 Hrs. Continuation of study in Applied Music (voice, piano, violin, pipe organ, band and orchestra instruments), including public performance of advanced compositions. Staff

302. **Advanced Applied Music.** II. 2 Hrs. Continuation of Music 301. Staff

305. **Advanced Public-School Music.** I. 3 Hrs. Survey and critical study of the vocal and instrumental repertoire of Public-School Music, with discussions of essentials in its performance. Miss Hinkel

306. **Advanced Public-School Music.** II. 3 Hrs. Continuation of Music 305. Comprehensive study, evaluation, and interpretation of musical masterpieces suitable for use in Public-School Music, including all of the principal types. Miss Hinkel

309. **Advanced Conducting.** I. 3 Hrs. Study and practice in the conducting of advanced choral and instrumental works, including advanced score-reading. Mr. Wood

313. **Advanced Orchestration.** II. 3 Hrs. A study in advanced technique of orchestral arranging including arranging of Bach's solo instrumental works. Mr. Wood

399. **Thesis.** I, II. 2 to 4 Hrs. Including research in the Major or related field of music. Staff

The College of Pharmacy

ORGANIZATION AND OBJECTIVES

In 1914, responding to the request of the West Virginia State Pharmaceutical Association, the Board of Regents established a Department of Pharmacy in the School of Medicine. The first course offered was a two-year course leading to the degree of Graduate in Pharmacy (Ph.G.).

In 1917 additional courses of three and four years, leading to the degrees of Pharmaceutical Chemist (Ph. C.) and Bachelor of Science in Pharmacy (B. S. Phar.), were established. Following the requirements of the American Association of Colleges of Pharmacy, of which the College is a member, the course leading to the degree of Graduate in Pharmacy was discontinued in 1924, and the course leading to the degree of Pharmaceutical Chemist was discontinued in 1932, so that a minimum of four years of study is now required.

The College of Pharmacy was established as a separate unit of the University, by order of the Board of Governors, in 1936.

The chief purpose of the college is to provide systematic instruction in pharmacy, its allied sciences, and such other subjects as are deemed essential in the education of a pharmacist, that he may meet the present and future demands of the profession in an able and intelligent manner. Its chief aim is to prepare its students for the intelligent practice of dispensing pharmacy, but it offers the facilities and instruction necessary for the practice of other branches of the profession, which are many and varied.

Graduates of the College of Pharmacy are eligible for examination to practice pharmacy in any state, but graduates of this college who successfully pass the West Virginia State Board of Pharmacy examination are privileged to reciprocate with 45 other states and with the District of Columbia, Alaska, and Porto Rico without further examination, provided they possess the experience requirement of these states before taking the examination.

THE STANDING COMMITTEE

SCHOLARSHIP COMMITTEE: Messrs. Hayman, Bergy, and Geiler.

REQUIREMENTS FOR THE DEGREE

The degree of Bachelor of Science in Pharmacy (B. S. Phar.) is conferred upon any student who complies with the general regulations of the University concerning degrees, satisfies all entrance and college requirements, and completes the basic two-year course and one of the following courses:

A. Retail Pharmacy or Pharmaceutical Administration (142 hours).

B. Industrial Pharmacy or Laboratory or Clinical Technician (144 hours).

The first two years of the curricula are the same for all students and include the basic course (see below). At the beginning of the third year the student is expected to select a field of specialization and pursue for the remaining two years the courses outlined in that group.

Substitutions. A student who desires to substitute another course in place of any course prescribed in his curriculum must obtain permission for such substitution from the Committee on Scholarship.

Basic Courses Required of All Students*

FIRST YEAR				SECOND YEAR			
First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*	*First Sem.*	*Hrs.*	*Second Sem.*	*Hrs.*
English 1	3	English 2	3	Pharm. 9	2	Pharm. 6	4
Botany 1	4	Botany 2	4	Pharm. 4	2	Pharm. 12	3
Pharm. 1	2	Pharm. 3	2	Pharm. 11	3	Pharm. 8	2
Pharm. 2	2	Pharm. 10	3	Pharm. 5	2	Pharm. 7	2
Chem. 3	4	Chem. 4	4	Chem. 5	4	Chem. 6	4
Phys. Ed. 1	1	Phys. Ed. 2	1	Military	2	Military	2
Military	1	Military	1				
	17		18		15		17

RETAIL PHARMACY‡

THIRD YEAR				FOURTH YEAR			
First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*	*First Sem.*	*Hrs.*	*Second Sem.*	*Hrs.*
Physics 1	3	Physics 2	3	Pharm. 108	3	Pharm. 110	3
Physics 3	1	Physics 4	1	Pharm. 201	3	Pharm. 113	5
Pharm. 103	2	Pharm. 107	2	Bacter. 101	5	Pharm. 118	1
Pharm. 106	2	Pharm. 114	2	Pharm. 109	1	Pharm. 202	2
Chem. 233	5	Physiol. 101	4	Pharm. 205	2		
Pharm. 101	1	Chem. 238	4				
Pharm. 102	1						
Pharm. 122	1						
	16		16		14		11

INDUSTRIAL PHARMACY**

THIRD YEAR				FOURTH YEAR			
First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*	*First Sem.*	*Hrs.*	*Second Sem.*	*Hrs.*
Physics 1	3	Physics 2	3	Pharm. 108	3	Chem. 277	2
Physics 3	1	Physics 4	1	Pharm. 201	3	Pharm. 110	3
Pharm. 103	2	Pharm. 107	2	Chem. 251	3	Pharm. 113	4
Pharm. 106	2	Chem. Eng. 201	3	Bacter. 101	5	Pharm. 118	1
Chem. 233	5	Physiol. 101	4	Pharm. 109	1	Pharm. 202	2
Chem. 163	3	Chem. 238	4	Pharm. 104	2	Chem. Eng. 202	2
Pharm. 205	2						
	18		17		17		14

*Upon entering, those who plan to follow the Pharmacy-Medical Course should elect zoology instead of botany during the first year. Psychology, 3 hours, and a modern foreign language, 12 hours, are required.

**Additional approved elective courses to make a total of 144 hours are required for graduation.

‡Additional approved elective courses to make a total of 142 hours are required for graduation.

Combined Science, Pharmacy, and Medical Course

Leading to the Degree of Bachelor of Science in the College of Arts and Sciences and in the School of Medicine

The Bachelor of Science degree in the College of Arts and Sciences and in the School of Medicine is conferred upon any student who complies with the general regulations of the University concerning degrees, satisfies all entrance and college requirements, and completes the basic two-year course outlined on page 230, and the three-year curriculum outlined below, including two years in the School of Medicine, and sufficient approved electives to total 184 hours.

THIRD YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Physics 1	3	Physics 2	3
Physics 3	1	Physics 4	1
Psych. 1	3	Pharm. 107	2
Pharm. 106	2	Chem. 36	6
Chem. 163	3	Fr. or Ger.	3
Fr. or Ger.	3		—
Zool. 231	4		
	—		
	19		15

FOURTH YEAR

Subject	*Hrs.*	*Subject*	*Hrs.*
Biochem. 201	6	Anatomy 202	
Histol. 201	5	Gross Anat'y	4
Anatomy 201		Physiol. 202	3
Gross Anat'y	7		—
Bacter. 202			
Med. Bacter.	5		
Embryol. 202	3		
Neurol. 203	3		
			36

FIFTH YEAR

Subject	*Hrs.*	*Subject*	*Hrs.*
Pathol. 201	8	Applied Anat. 204	2
Physiol. 203	7	Phys. Diagnos. 201	3
Pharm. 202, Systematic Pharm.	3	Med. 202, Theoretical Medicine	2
Hygiene 203	2	Pathol. 203, Clinical Pathology	3
Obstetrics 201	2	History of Med. 203	
Pharmacol. 203	4	Special Pathol. 202	1
Surgery 201	3		—
			40

Suggested Elective Courses

NOTE: All Electives Must Be Approved by the Adviser Before Election

FIRST SEMESTER

Subject		*Hrs.*
Biol. 1	Biology	4
Bot. 221	Plant Physiol.	4
Bus. Ad. 121	Elements of Marketing	3
Bus. Ad. 131	Bus. Management	3
Bus. Ad. 141	Business Law	3
Chem. 211	Synthetic Inorganic Chemistry	3
Chem. 214	Organic Qual. Anal.	3
Chem. 251	Industrial Inorganic Chemistry	3
Chem. 63 or 163	Physical Chemistry	3
Chem. 247	Stereochemistry	2
Chem. 141	Assigned Topics	1 to 5
Chem. 277	Synthetic Drugs	2

SECOND SEMESTER

Subject		*Hrs.*
Bus. Ad. 126	Modern Merchandising	3
Bus. Ad. 122	Marketing Management	3
Bus. Ad. 148	Sales Management	3
Chem. 252	Indust. Org. Chem.	3
Chem. 262	Colloidal Chem.	4
Chem. 274	History of Chem.	2
Chem. 142	Assigned Topics	1 to 5
Chem. 214	Organic Qual. Anal.	3
Chem. 222	Food Analysis	3
Chem. 277	Synthetic Drugs	2
Ch. Eng. 102	Blow-Pipe Anal. and Assaying	2
Ch. Eng. 201	Unit Organic Processes	3

SUGGESTED ELECTIVE COURSES (Continued)

FIRST SEMESTER			SECOND SEMESTER		
Chem. 343	Advanced Organic Chem.	3	Ch. Eng. 202	Water Exam. and Purification	2
Econ. 1	Principles of Econ.	3	Econ. 1	Principles of Econ.	3
Econ. 2	Principles of Econ.	3	Econ. 2	Principles of Econ.	3
Econ. 103	Principles of Econ.	3	Econ. 114	Corporation Finance	3
Econ. 113	Bus. Organization	3	French 2	(When not offered for entrance credit)	3
Econ. 111	Money and Banking	3	German 2	(When not offered for entrance credit)	3
French 1	(When not offered for entrance credit)	3	German 122	Scientific German	3
Geol. 284	Mineralogy	4	Journal. 113	Newspaper Adv's.	3
German 1	(When not offered for entrance credit)	3	Math. 3	College Algebra	4
German 121	Scientific German	3	Math. 4	Plane Trigonometry	2
Math. 3	College Algebra	4	Mineral. 2	Minerals and Rocks	4
Math. 4	Plane Trigonometry	2	Pharm. 115	Microscopy	2 to 3
Mineral. 2	Minerals and Rocks	4	Pharm. 116	Pharmaceutical Investigations	2 to 3
Pharm. 115	Microscopy	2 to 3	Pharm. 117	Dispensing	1 to 2
Pharm. 116	Pharmaceutical Investigation	2 to 3	Physics 110	Problems in General Physics	2
Pharm. 117	Dispensing	1 to 2	Physics 116	Photography	2
Physics 109	Problems in General Physics	2	Pub. Speak. 11	Effective Speaking	3
Pub. Speak. 11	Effective Speaking	3	Zool. 2	Vertebrate Zool.	4
Sociol. 101	Introd. to Sociol.	3	Psychol. 1	Intro. to Psychol.	3
Zool. 3	General Zoology	4	Psychol. 10	Applied Psychol.	3
Zool. 231	Comparative Anat.	4	Psychol. 12 or 112	Experimental Psychology	3

THE COURSES OF INSTRUCTION

(For explanation of abbreviations see page 81)

Professors HAYMAN and BERGY and Assistant Professor GEILER

1. **Theoretical Pharmacy.** I. 2 Hrs. Descriptive and experimental lectures and recitations, embracing a study of the apparatus and technique necessary for the correct procedure in the manufacture of pharmaceutical preparations (36 hours). Lectures and recitations. Mr. Geiler
2. **Pharmaceutical Arithmetic and Stoichiometry.** I. 2 Hrs. Lectures and recitations (36 hours). Mr. Geiler
3. **Pharmaceutical Arithmetic.** II. 2 Hrs. Continuation of Pharmacy 2. Lectures and recitations (36 hours). Mr. Geiler
4. **Operative Pharmacy Lectures.** I. 2 Hrs. A systematic consideration of the various official preparations for which the Pharmacopoeia and National Formulary give formulas and processes. Lectures and recitations (36 hours). Mr. Geiler
5. **Operative Pharmacy Laboratory.** I. 2 Hrs. This course is carried in conjunction with Pharmacy 4. The representative classes of preparations of the Pharmacopoeia and National Formulary are manufactured. (100 hours). Mr. Geiler
6. **The Art of Compounding.** II. 4 Hrs. The more difficult pharmaceuticals and miscellaneous preparations are considered in connection with the modern methods of compounding. The latter part of the course is devoted

to intensive study of the methods of preparation and standardization of biologicals. Lectures and recitations (72 hours). Mr. Bergy

7. **Art of Compounding Laboratory.** II. 2 Hrs. A laboratory course in conjunction with Pharmacy 6. Laboratory (100 hours). PR: Pharmacy 4 and 5. Mr. Bergy

8. **Pharmaceutical Jurisprudence.** II. 2 Hrs. An intensive study of the Harrison Narcotic Law, the West Virginia Pharmacy Law, and other state and national laws pertaining to pharmacy. Lectures and recitations (36 hours). Mr. Hayman

9. **Pharmaceutical Latin.** I. 2 Hrs. Pronunciation, declension, English and Latin translations, comparisons, abbreviations, and vocabularies of medicine and pharmacy. Lectures and recitations (36 hours). Mr. Hayman

10. **Vegetable Histology.** II. 3 Hrs. The microscopical characteristics of starches, powdered vegetable drugs, and their adulterants. Lectures and recitations (18 hours), laboratory (100 hours). Mr. Hayman

11. **Pharmacognosy.** I. 3 Hrs. An intensive study of vegetable and animal drugs, their collection, preparation, constituents, and applicability. Lectures and recitations (54 hours). Mr. Hayman

12. **Pharmacognosy.** II. 3 Hrs. A continuation of Pharmacy 11. Lectures and recitations (54 hours). Mr. Hayman

101. **Commercial Design.** I. 1 Hr. Practical water-color lettering emphasizing arrangement and color harmony, for show cards and store windows. Laboratory (50 hours). Mr. Hayman

102. **Accounting.** I. 1 Hr. Laboratory (50 Hours). Mr. Hayman

103. **Hygiene.** I. 2 Hrs. Lectures and recitations (36 hours). Mr. Bergy

104. **Qualitative of the Alkaloids and Synthetics.** I. 2 Hrs. Laboratory (100 hours). Mr. Hayman

106. **Pharmaceutical Chemistry.** I. 2 Hrs. Deals specifically with inorganic chemistry as applied to pharmacy. Lectures and recitations (36 hours). Mr. Bergy

107. **Pharmaceutical Chemistry.** II. 2 Hrs. A continuation of Pharmacy 106. Special attention to the chemistry and adaptability of germicides, fungicides, parasites, rodenticides, etc. (36 hours). Mr. Bergy

108. **Prescriptions and Incompatibilities.** I. 3 Hrs. The prescription is studied relative to the interpretation of the chemical, pharmaceutical, and therapeutical incompatibilities, posology, art of dispensing, and Latin nomenclature. Lectures and recitations (54 hours). Mr. Hayman

109. **Prescription Practice.** I. 1 Hr. A laboratory course accompanying Pharmacy 108. Laboratory (50 hours). Mr. Hayman

110. **Assay and Pharmaceutical Testing.** II. 3 Hrs. A critical study of U. S. P. & N. F. methods of assays. Lecture (18 hours), laboratory (100 hours). Mr. Geiler

113. **U. S. P. and N. F.** II. 5 Hrs. A comprehensive study of the United States Pharmacopœia and the National Formulary, including review on related subjects. Recitations (90 hours). Mr. Hayman

114. **Commercial Pharmacy.** II. 2 Hrs. The establishment, management, and development of a modern pharmacy, with special emphasis on business economics, accounting, correspondence, salesmanship, and advertising. Lectures and recitations (36 hours). Mr. Geiler

115. **Advanced Microscopy.** I or II. 2 to 3 Hrs. A laboratory course concerned with the microscopy of vegetable foods and technical products, quantitative microscopic methods, and micrometry. Permission of in-

structor must be obtained before electing. Laboratory (100 to 150 hours). Mr. Hayman

116. **Pharmaceutical Investigation.** I or II. 2 or 3 Hrs. Original investigation in pharmacy or pharmaceutical chemistry. Laboratory and collateral reading (100 to 150 hours). Mr. Hayman and Staff

117. **Dispensing.** I or II. 1 or 2 Hrs. A practical course in University Pharmacy under the supervision of a registered pharmacist in compounding, pricing, and filing prescriptions. Laboratory (50 to 100 hours). Mr. Hayman and Staff

118. **New and Non-Official Remedies.** II. 1 Hr. A critical study of the most recent pharmaceutical introductions as approved by the Council of Pharmacy of The American Medical Association. Lectures and recitations (18 hours). Mr. Bergy

120. **Cosmetics.** I. 1 or 2 Hrs. A laboratory course devoted to compounding a large number of preparations of this type, including perfumes (54 or 108 hours). Mr. Bergy

121. **Household Products.** II. 1 or 2 Hrs. Laboratory (108 Hours) Mr. Bergy

122. **Inorganic Preparations.** I. 1 Hr. Laboratory (54 hours). Mr. Geiler

201. **Pharmacology.** I. 3 Hrs. A general survey of the pharmacological, antidotal, and therapeutic action of the more potent drugs which the pharmacist is called upon to dispense. Lectures and recitations (54 hours). Mr. Bergy

202. **Pharmacology.** II. 2 Hrs. A continuation of Pharmacy 201. Lectures and recitations (36 hours). Mr. Bergy

205. **History of Pharmacy.** I or II. 2 Hrs. Mr. Bergy

The School of Physical Education and Athletics

HISTORY AND PURPOSE

The Division of Physical Education was established on the Campus in 1928 and became the School of Physical Education and Athletics, in 1937. It serves many purposes, as follow:

1. It organizes and develops the recreation of the students and faculty groups.
2. It provides leadership and facilities for a regular program of instruction and participation in physical activity according to the individual needs, capacities, and interests.
3. It prepares teachers and supervisors in health and physical education in secondary schools and colleges.
4. It prepares coaches of athletic teams in secondary schools and colleges.
5. It prepares workers in the fields of public recreation and of safety education.

In cooperation with the College of Education the School of Physical Education and Athletics maintains a Bureau of Recommendation[1] which makes available to school officials and other administrative officials the credentials of students or alumni who are candidates for positions.

ORGANIZATION

For purposes of administration and instruction the School of Physical Education and Athletics is organized into the following departments:

I. Service program for men.
II. Service program for women.
III. Curriculum for majors, preparing for positions in health and physical education, athletic coaching, and recreation.
IV. Intramural Sports

Many of the departments of the school serve the students of all departments of the University by providing a systematic program of physical education and recreation.

The department of curriculum for majors provides professional training for all men and women who are desirous of becoming teachers of physical education and coaches in high schools and colleges, or directors of public recreation. Those who complete the course will also have satisfied the prerequisites for entrance into departments in universities giving training in therapeutics. Anyone completing the course of study outlined by the school and authorized by the University and receiving an honor-point average of one honor point for each credit hour taken in the University qualifies for the degree of Bachelor of Science in Physical Education (B.S.P.E.). Courses are also offered in health and physical education at the graduate level leading to the Master of Science degree. The bulletins and announcements of the Graduate Council should be referred to for further details of the residence and course requirements. During the summer session a special coaching school is con-

[1]See page 66.

ducted for coaches in secondary schools and colleges. Nationally known visiting coaches augment the regular staff.

Facilities

Men's Field House, completed in 1928, which is located on the lower Campus near the Monongahela River, provides facilities (including lockers and showers) for physical education classes, intramural sports, and intercollegiate athletics and contains the administrative offices of the School of Physical Education and Athletics. Immediately adjacent are five tennis courts, eight horseshoe pitching courts, and two archery ranges.

Elizabeth Moore Hall: This building, situated on the upper Campus completed in 1928, provides social, recreational, and physical education facilities for women students. It also houses the offices of the department of service program for women. All the women's organizations on the Campus use the building as a meeting place. Its appointments and facilities make it ideal for the holding of receptions and social events. The gymnasium, which is well equipped, the locker and showers, and the swimming pool provide excellent recreation and physical education facilities.

Mountaineer Field: On the north border of the lower Campus is located the Stadium, enclosing Mountaineer Field. This monolithic concrete and steel structure was erected in 1924, largely through subscriptions of alumni and former students but also with the help of other contributors. It has a seating capacity of 34,000. Mountaineer Field provides facilities for intercollegiate football, track, and field events as well as for the physical education programs.

The administrative offices of the department of inter-collegiate athletics are housed in the horseshoe of the Stadium.

Playfields are provided on the Campus for the physical education activities. The old Athletic Field of 1.6 acres is used for baseball and football practice as well as for activities in physical education. The Freshmen Field, 0.9 acres, is used for football practice as well as for the program of physical education. Observatory Hill, 1.1 acres, provides space for the pupils of the University Demonstration High School as well as for the physical education program of the college students.

The Service Program for Men

The courses offered in this department are designed to meet the needs of the men of the University for an organized program of instruction and recreation during their period of residence. The purposes of the department are to develop recreational skills which can be enjoyed while in college and invested in leisure time after college, to establish habits of regular participation, and to develop favorable attitudes toward wholesome play.

Students completing Physical Education 1 and 2 meet the University requirements of two hours' credit in physical education as a prerequisite for graduation of all students subject to this requirement.

During Freshmen Week all freshmen report at the Men's Field House for

assignment of lockers and for appointment for physical and medical examination and physical achievement tests. These examinations and tests are the guide in the selection of a program of physical education for the individual student. See the Bulletin of the department of service program for men.

The Service Program for Women

The courses offered in this department are designed to meet the needs of the women of the University for an organized program of instruction and recreation during their period of residence. Four semester hours of three periods each week are required for graduation of all women students unless they enter with 58 hours of advanced credit. The offerings include both indoor and outdoor activities.

Each woman student subject to the foregoing requirements is required to pass a minimum test in swimming, play skillfully one highly organized sport and one individual sport, meet a definite standard of rhythm, and gain a knowledge of hygiene in relation to wholesome living.

The attention of students is directed to the general requirements of the University concerning entrance, admission with advanced standing, requirements as to residence, classification of students, examinations, grades, and honor points, as set forth in the General Information section (Part II) of this Catalogue.

THE GENERAL AND SPECIALIZED CURRICULA

A General Curriculum looking toward broad, general preparation in the fields of health and physical education, athletic coaching, and public recreation and providing teacher certification and graduation with a degree of Bachelor of Science in Physical Education is offered by the School of Physical Education and Athletics.

Plans have been approved also for the development of three Specialized Curricula looking toward additional and more detailed training in either health education, athletic coaching, or public recreation. Students generally will take, in their first two years, background work in science and the general liberal arts subjects. In the Junior year opportunity is offered to continue the general curriculum, which provides broad training in health and physical education, athletic coaching, and recreation, or to elect one of the three specializing curricula, which will enable the student to devote more time to the chosen field of either health education, athletic coaching, or recreation.

The General Curriculum has been modified by action of the faculty and of the Council of Administration in the spring of 1940 in order to provide a greater number of hours in health education and recreation and to make mandatory the work in camping and safety education by all majors. The Specialized Curricula will be made available as rapidly as personnel and facilities permit. The requirements for teacher certification and graduation will remain the same.

The Standing Committees

SCHOLARSHIP: Messrs. Samuel and Webster; Misses Griffin and Hurst.

GRADUATE COURSES: Messrs. Webster and Samuel; Miss Griffin, and Miss Fox.

INTRAMURAL SPORTS: Messrs. Samuel, Webster, Hawley, Thompson, and senior managers.

PLACEMENT AND RECOMMENDATION: Mr. Thompson and Miss Griffin.

ATHLETIC BOARD: Messrs. Thompson, Deem, Hockenberry, Ennis, Grumbein, Hawley, Pride, Stemple, and Strausbaugh.

REQUIREMENTS FOR THE DEGREE

The degree of Bachelor of Science in Physical Education may be conferred upon any student who satisfies the entrance requirements and offers 128 hours[1] with grades of D or above, and an average grade of C.

Required and Elective Subjects

Of the 128 hours which are required for the degree of Bachelor of Science in Physical Education, at least 40 hours are required in the School of Physical Education and Athletics. The remaining hours must be selected from such courses as may be approved by the adviser. A candidate for a degree is required to make a selection of one of the teaching combinations on page 13, and to complete the number of semester hours required in each teaching group.

The courses are arranged to meet the University requirements for the degree of Bachelor of Science in Physical Education as well as the State requirements for certification. The curriculum for the four-year course has been so arranged that consideration is given to the various activities which should constitute a well-rounded program of physical education for boys and girls of high-school age. These courses are arranged in eight groups as follows:

A. Required courses in physical education which include the theory and practice of physical education courses for men and women are: Physical Education 11, 12, 13, 14, 43, 44, 45, 46, 111, 112, 113, 114, 141, 142, 143, 144, and 156 for men; and Physical Education 25, 26, 27, 28, 57, 58, 59, 60, 125, 126, 127, 128, 151, 157, 158, 159, and 160 for women. These courses are known as the Physical Education block.

B. Required courses in physical education which include courses in theory are: Physical Education 74, 77, 150, 166, 167, 175, and 277.

C. Required courses in recreation which include both theory and practice in recreation for men and women are: Recreation 1, 2, 3, and 101.

D. Required courses in health education, namely, Health Education 1, 2, 101, and 103.

E. A required course in safety education, namely, Safety Education 181.

F. Required courses in English and public speaking.

G. Required courses in science which furnish a background for physical education.

H. Required courses in education which consider the principles of general education.

[1]Students may decrease the number of hours required for graduation by doing work of superior quality. For details see page 52.

I. Required courses in social studies.

J. Required courses in military science for men of the University.

K. Elective courses which are taken at the pleasure of the student.

It is understood that a sound and vigorous body is essential to all students who elect this curriculum. Each student must, therefore, pass a thorough physical examination before he will be allowed to enroll in this program. Special emphasis is placed upon the personal and professional qualifications of the student as well as upon a high standard of scholarship.

Student teaching of high-school classes in physical education, as well as practice coaching of high-school athletic teams is available in the University Demonstration High School. Student assistance in college classes in physical education is required in connection with the service programs for both men and women. Additional practical opportunities are frequently available in the Monongalia County schools.

THE FOUR-YEAR CURRICULUM IN PHYSICAL EDUCATION

(*Leading to the Degree of Bachelor of Science in Physical Education*)

GENERAL MINIMUM REQUIREMENTS:

Physical education for men (28); for women (29); health education (8); recreation (8); safety education (2); English and public speaking (12); social studies (12); science — anatomy, biology, chemistry, physiology (20); education (20); military science (men) (6); electives (men) (12); electives (women) (17).

NOTE: Humanities 1 and 2 may be substituted for History 1 and 2. Social Science 1 and 2 may be substituted for Sociology 101 and for social studies.

The Curriculum in Physical Education for Men

FIRST YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
English 1	3	English 2	3
Biology 1	4	History 2	3
History 1	3	Phys. Ed. 13	1
Phys. Ed. 11	1	Phys. Ed. 14	1
Phys. Ed. 12	1	Pub. Spk. 11	3
Health Ed. 1	2	Elective	4
Mil. Sci. 1	1	Mil. Sci. 2	1
	15		16

SECOND YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Engl. 3, 4, or 5	3	Phys. Ed. 74	4
Chemistry 1	4	Chemistry 2	4
Phys. Ed. 43	1	Phys. Ed. 45	1
Phys. Ed. 44	1	Phys. Ed. 46	1
Phys. Ed. 77	2	Recreation 2	2
Recreation 1	2	Social studies	3
Recreation 3	2	Mil. Sci. 4	2
Mil. Sci. 3	2	Health Ed. 2	2
	17		19

THIRD YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Educ. 106	3	Zool. 151	4
Educ. 109	2	Phys. Ed. 113	1
Educ. elective	2	Phys. Ed. 114	1
Phys. Ed. 111	1	Phys. Ed. 150	3
Phys. Ed. 112	1	Recreation 101	2
Phys. Ed. 175	3	Educ. elective	2
Health Ed. 101	2	Sociol. 101	3
Safety Ed. 181	2		—
Ser. Program Assistance	0		16
	16		

FOURTH YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Phys. Ed. 141	1	Phys. Ed. 142	1
Phys. Ed. 143	1	Phys. Ed. 144	1
Health Ed. 103	2	Phys. Ed. 156	1
Educ. 120 }	2	Phys. Ed. 277	3
Educ. 152 } (8 hours) *or electives*	2	Educ. 120 }	2
Educ. 224 }	3	Educ. 152 } (8 hours) *or electives*	2
Ed. elect. }	2	Educ. 224 }	3
Educ. 214 }	2	Ed. elect. }	2
	12 or 15	Educ. 214 }	2
			15 or 17

The Curriculum in Physical Education for Women

FIRST YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
English 1	3	English 2	3
History 1	3	History 2	3
Biology 1	4	Eng. Lit.	
Pub. Spk. 11	3	or elect.	3
Phys. Ed. 25	1	Phys. Ed. 26	1
Phys. Ed. 27	1	Phys. Ed. 28	1
Health Ed. 1	2	Electives	4
	17		15

SECOND YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Eng. Lit. or elect.	3	Phys. Ed. 74	4
Chemistry 1	4	Phys. Ed. 58	1
Phys. Ed. 57	1	Chemistry 2	4
Phys. Ed. 59	1	Phys. Ed. 60	1
Phys. Ed. 77	2	Recreation 2	2
Recreation 1	2	Social stud.	3
Recreation 3	2	Electives	3
	15	Health Ed. 2	2
			17

THIRD YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Educ. 106	3	Zool. 151	4
Educ. 109	2	Sociol. 101	3
Educ. elect.	2	Educ. elect.	2
Phys. Ed. 125	1	Phys. Ed. 126	1
Phys. Ed. 127	1	Phys. Ed. 128	1
Phys. Ed. 167	2	Phys. Ed. 166	3
Phys. Ed. 175	3	Recreation 101	2
Health Ed. 101	2	Phys. Ed. 151	2
Safety Ed. 181	2		18
	18		

FOURTH YEAR

First Sem.	*Hrs.*	*Second Sem.*	*Hrs.*
Phys. Ed. 157	1	Phys. Ed. 158	1
Phys. Ed. 159	1	Phys. Ed. 160	1
Health Ed. 103	2	Phys. Ed. 277	3
Educ. 120	2	Educ. 120	2
Educ. 152	2	Educ. 152	2
Educ. 224	3	Educ. 224	3
Ed. elect.	2	Ed. elect.	2
Educ. 214	2	Educ. 214	2
or electives (8 hours)		*or electives* (8 hours)	
	12 or 15		13 or 16

The Certification Requirements

For a statement of the conditions governing the preparation of high-school teachers and their recommendation to the State Board for certification, see the special Bulletin, Teacher Certification Regulations at the University.

The General Physical Education Requirements for Certification

All students who plan to be certificated to teach must meet the University requirement of a minimum of four (4) hours (men) and six (6) hours (women) of Health and Physical Education. The specific courses offered to meet this requirement are as follow: FOR MEN: Physical Education 1* (1); 2* (1); Health Education 180 (2).[1] Total, 4 hrs. FOR WOMEN: Physical Education 1* (1); 2* (1); 3* (1); 4* (1); Health Education 180 (2). Total, 6 hrs.

Suggested Teaching Combinations for First-Class High-School Certificates

1. Physical education and biology.
2. Physical education and mathematics.
3. Physical education and social studies.
4. Physical education and English.

*This requirement should be met by the men in their first year of residence and by the women in their first two years of residence.

[1]Health Education 101 or 103 are open only to juniors and seniors.

5. Physical education and physical and general science.
6. Physical education and physical science.

THE UNDERGRADUATE CURRICULUM FOR MAJORS

(*Leading to the Degree of Bachelor of Science in Physical Education*)

(First or Second Teaching Subject)

REQUIRED COURSES FOR MEN: Physical Education 11, 12, 13, 14, 43, 44, 45, 46, 111, 112, 113, 114, 141, 142, 143, 144, and 156 — Theory and Practice of Physical Education for freshmen, sophomores, juniors, and seniors (17 hrs.); Individual Gymnastics 150 (3). Total 20 hrs.

REQUIRED COURSES FOR WOMEN: Physical Education 25, 26, 27, 28, 57, 58, 59, 60, 125, 126, 127, 128, 151, 157, 158, 159, and 160 — Theory and Practice of Physical Education for freshmen, sophomores, juniors, and seniors (16 hrs.); Individual Gymnastics 166 (3); Rhythmic Form and Analysis 167 (2). Total, 21 hrs.

REQUIRED COURSES FOR MEN AND WOMEN: Personal Health in Campus Situations (2); Personal and Community Hygiene (2); School Health Problems (2); Administration of Health Education (2); The Camping Movement (2); Safety Education (2); Management and Direction of Playgrounds (2); Management and Direction of Social Centers (2); Administration of Public Recreation (2); Administration of Physical Education (2); Kinesiology (3); Anatomy (4).

THE CURRICULUM FOR MAJORS

Professors THOMPSON and MORRIS; Associate Professors GRIFFIN and SAMUEL; Assistant Professors HURST, RODGERS, SMITH, and WEBSTER; Instructors ERLANGER, FOX, KERN, KUTZ, and RAESE

Theory and Practice of Physical Education for Men

All courses indicated in the block of theory and practice of physical education for men are offered on Monday, Wednesday, and Friday, and on Tuesday, Thursday, and Saturday from 8:00 to 10:00 a. m.

Physical Education 11, 12, 13, and 14 are required of freshmen men; Physical Education 43, 44, 45, and 46 are required of sophomore men; Physical Education 111, 112, 113, and 114 are required of junior men; and Physical Education 141, 142, 143, 144, and 156 are required of senior men.

Lower Division

11. Football. I. 1 Hr. Theory and practice in the fundamentals of football. Mr. Rodgers

12. High-School Activities. I. 1 Hr. Theory and practice in an activity program suitable for junior and senior high-school boys. Mr. Samuel

13. Marching, Games, and Relays. II. 1 Hr. Theory and practice in an activity program suitable for junior and senior high-school boys. Mr. Samuel

14. Baseball. II. 1 Hr. Theory and practice in the fundamentals of baseball. Mr. Rodgers

43. Scoutmastership. I. 1 Hr. The aims of the Boy Scout movement, its plan of organization, and the curriculum. Mr. Samuel

44. **Basketball.** I. 1 Hr. Theory and practice in the fundamentals of basketball. Mr. Raese

45. **Apparatus and Tumbling.** II. 1 Hr. Natural activities in tumbling and the fundamentals of work on the apparatus. Mr. Kutz

46. **Track and Field Athletics.** II. 1 Hr. Theory and practice in the fundamentals of track and field athletics. Mr. Smith

Upper Division

111. **Athletic Conditioning and Training.** I. 1 Hr. Lectures, demonstrations, and practice work in the training and conditioning of athletes. Mr. Smith

112. **First Aid.** I. 1 Hr. Study of the standard and advanced first-aid requirements, and the work given for the Teacher's Certificate in first aid as set up by the American Red Cross. Mr. Smith

113. **Wrestling and Boxing.** II. 1 Hr. Theory and practice in the fundamentals of wrestling and boxing. Mr. Rodgers

114. **Minor Sports.** II. 1 Hr. Theory and practice in the fundamentals of badminton, golf, handball, tennis, and volleyball. Mr. Webster

141. **Theory of Coaching Football.** I and SII. 1 Hr. 9 weeks. Theory and practice, including study of various systems and styles of play with special lectures on and practical experience in officiating. Staff

142. **Theory of Coaching Track.** II and SII. 1 Hr. 9 weeks. Theory and practice, with special lectures on and practical experience in officiating, and administration of track and field meets. Staff

143. **Theory of Coaching Basketball.** I and SII. 1 Hr. 9 weeks. Theory and practice, including study of various systems and styles of play with special lectures on and practical experience in officiating. Staff

144. **Theory of Coaching Baseball.** II and SII. 1 Hr. 9 weeks. Theory and practice, with special lectures on and practical experience in officiating. Staff

156. **Swimming, Life-saving, and Water Safety.** II. 1 Hr. Theory and practice in aquatics and safety and their use in the program of physical education. An opportunity will be given to qualify for the American Red Cross Water Safety Instructor Certificate. Messrs. Thompson and Stoner

Theory and Practice of Physical Education for Women

All courses indicated in the block of theory and practice of physical education for women are offered on Monday, Wednesday, and Friday from 8:00 to 10:00, on Monday, Wednesday, and Friday from 1:00 to 2:00, and on Tuesday, Thursday, and Saturday from 8:00 to 10:00. Assisting is arranged individually at convenient hours and is required of all major students without credit. Physical Education 25, 26, 27, and 28 are required of freshmen women; Physical Education 57, 58, 59, and 60 are required of sophomore women; Physical Education 125, 126, 127, and 128 are required of junior women; and Physical Education 157, 158, 159, and 160 are required of senior women.

Lower Division

25. **Soccer, Speedball, and Basketball.** I. 1 Hr. Fundamentals and practice in playing soccer, speedball, and basketball. Miss Fox

26. **Minor Sports.** II. 1 Hr. Fundamentals and practice in playing badminton, bowling, croquet, deck tennis, horseshoes, paddle tennis, shuffleboard, table tennis, and tennis. Miss Fox

27. **Swimming, Diving, and Life-Saving.** I. I Hr. Elementary and advanced strokes, standard dives, and life-saving. Miss Griffin

28. **Modern (Natural) Dancing.** II. 1 Hr. Techniques of modern dance, methods of teaching different age groups, and a knowledge of the historical background of dancing from primitive times to the present. Miss Erlanger

57. **Gymnastics.** I. 1 Hr. The Swedish, German, and Danish gymnastic systems which have been practiced in the United States, studied as background for an understanding of the modern program. Staff

58. **Stunts, Tumbling, and Heavy Apparatus.** II. 1 Hr. Stunts, tumbling, and pyramid building suitable for elementary, junior, and senior high-school girls. Knowledge of and skill in heavy apparatus is included. Miss Fox

59. **Folk Dancing.** I. 1 Hr. The history of Folk Dancing, knowledge of fundamentals, and learning of dances from all countries. Miss Hurst

60. **Archery and Tennis.** II. 1 Hr. Fundamentals and practice in archery and tennis and methods of teaching these activities. Miss Hurst

Upper Division

125. **Swimming Technique and Water Safety.** I. 1 Hr. Technique of instruction and practice in its application; safety needs and devices. Miss Griffin

126. **Clog and Tap Dancing.** II. 1 Hr. Fundamentals and practice in clog and tap dancing. Miss Hurst

127. **First Aid.** I. 1 Hr. Standard and advanced First Aid as outlined by the American Red Cross plus the Special Course which is given by a representative from National Red Cross Headquarters. Miss Hurst

128. **Soft Ball and Field and Track.** II. 1 Hr. Fundamentals and practice in soft ball, girls' indoor and outdoor baseball. Adapted field and track activities for girls. Miss Fox

157. **Graded Games and Lead-Up Games.** I. 1 Hr. Games for all ages which may be used in the home, school, playground, and gymnasium, and lead-up games for the various sports. Miss Hurst

158. **Social Dancing and Festivals and Pageants.** II. 1 Hr. Technique of social dancing and methods of teaching it. A study of festivals and pageants as used in schools and recreation centers. Staff

159. **Field Hockey and Basketball Technique.** I. 1 Hr. Fundamentals and practice in field hockey. Technique and practice in teaching and officiating basketball. Miss Fox

160. **Seminar.** II. 1 Hr. The problems of curriculum construction, the testing program, girls' athletics, organization of intramural activities, play days, etc. Officiating in intramural games. Staff

Note: An opportunity is provided for individual specialization in sports, swimming, or dancing, in addition to the activity of the block program. If students are especially interested in specialization in dancing, their course will include some allied subjects such as history of art, pageantry, dramatics.

Theory Courses in Physical Education

Lower Division

FOR MEN AND WOMEN

Recreation 3. The Camping Movement. I. 2 Hrs. A course in training camp counselors. The essentials embraced are: history of organized camps, aims, camp sites and equipment, activities, vocational opportunities, the requirements and qualifications of personnel. Mr. Smith, Mr. Thompson, and Miss Fox

P. E. 74.* **Anatomy.** II. 4 Hrs. Required of Physical Education majors.
Dr. Morris

Health Education 1. Personal Health in Campus Situations. I. 2 Hrs. Actual daily health problems; practices making for physical and mental well-being on the part of University students.
Dr. Morris, Mr. Thompson, Miss Noer, and Miss Griffin

Health Education 2. Personal and Community Hygiene. II. 2 Hrs. Those phases of hygienic living which should be understood by all college students. Special emphasis placed on the personal aspects of hygiene. This course may not be elected as a substitute for P. E. 180 or 276.
Mr. Samuel

P. E. 77. History of Physical Education. I. 2 Hrs. The development of physical education from early civilization to the present time, giving attention to the early Greek and Roman periods, the German, Swedish, and Danish systems, and developments in the modern programs in the various countries. Miss Griffin

Recreation 1. Management and Direction of Playgrounds. I. 2 Hrs. Arranged to prepare the student in physical education for the direction and supervision of playgrounds in the municipal recreation program. Mr. Webster

Recreation 2. Management and Direction of Social Centers. II. 2 Hrs. Arranged to prepare the student in physical education for the direction and supervision of social centers in the municipal recreation program.
Mr. Webster

Upper Division

FOR MEN

150. Individual Gymnastics. II. 3 Hrs. The diagnosis of abnormal cases found in the classroom including overweight, underweight, post-operative, postural, and flat-foot cases, with the prescription of activities for their correction. Mr. Webster

FOR WOMEN

151. Club Leadership for High-School Girls. II, SII. 2 Hrs. A study of the Girl Scouts, Camp Fire Girls, Girl Reserves, and other movements which are designed as character-building organizations for adolescent girls. Special attention will be given to methods of leadership based on adolescent psychology. Miss Griffin

166. Individual Gymnastics. II. 3 Hrs. Analysis of normal posture and individual deviations with treatment of the latter by physical activity and massage. The course will cover personal health problems that can be treated by exercise. Miss Fox

167. Rhythmic Form and Analysis. I. 2 Hrs. Designed to give an understanding of the nature and scope of rhythm in the physical education program. Opportunity is offered for practice in the analysis of dance steps and the building of dance patterns. Miss Erlanger

FOR MEN AND WOMEN

175. Kinesiology. I. 3 Hrs. The principles of the mechanics of bodily movements in relation to the anatomical structure. Miss Fox

Health Education 101. School Health Problems. I. 2 Hrs. Problems facing teachers and school administrators in the school day.
Mr. Thompson, Dr. Morris, and Miss Griffin

Health Education 103. Administration of School Health. I. 2 Hrs. Ways and means by which the best principles and practices of health education

* Accepted by the State Department of Education as a cognate in the field of biology.

may be applied to the public-school situation; importance of health education in the total pupil experiences in public education.
Dr. Morris and Mr. Thompson

Health Education 180. Public School Health. I, II. 2 Hrs. This course in hygiene meets the general requirements for state teachers' certificates.
Dr. Morris

Recreation 101. Administration of Public Recreation. II. 2 Hrs. Relation of public recreation to public education; problems of administration.
Mr. Thompson

277. Administration of Physical Education. II and SI. 2 or 3 Hrs. The modern theories in physical education; guiding principles in the organization and administration of physical education; and the objects, content, and materials of activities in the gymnasium and on the playground.
Mr. Thompson

Safety Education 181. Safety Education. II. 2 Hrs. Safety needs and practices in the home, on the highways and streets, in schools and on playgrounds, and in industry. Educational procedures and programs of education at various levels are presented. Miss Griffin

THE GRADUATE CURRICULUM IN PHYSICAL EDUCATION

(Leading to the Degree of Master of Science)

Candidacy: The candidate must hold the degree of Bachelor of Science in Physical Education or its equivalent from an approved college. The equivalent will be determined by the committee on graduate courses of the School of Physical Education and Athletics. Additional hours may be required of students who have had inadequate undergraduate preparation.

Course Requirements: No less than 30 hours (including a thesis) of graduate work, approved by the Graduate Council, the advisers, and the committee on graduate courses of the School of Physical Education and Athletics must be taken in West Virginia University. At least 12 hours (exclusive of the thesis) shall be in physical education, and the remaining hours may be in related subjects or other fields. One-third of the hours required for the degree must be in courses numbered 300 or above.

NOTE: Courses marked by an asterisk (*) are required of all candidates for the Master of Science degree.

224. Physiological Analysis of Activities. II and SI. 2 Hrs. Analysis of physiological changes which occur in the body during exercise.
Miss Erlanger

243. National Youth Service Organizations and Their Contribution to Health and Physical Education and Recreation. SI. 2 Hrs. This course will discuss the organization and program of national agencies and their potential contributions to the school program in health education, physical education, and recreation. Mr. Samuel and Miss Griffin

271. Administration of Camps and the Preparation of Camp Counselors. II and SI. 2 Hrs. The principles involved in the modern camping program and the methods of organization and administration of organized camps. A special problem in administration or program will be undertaken.
Mr. Thompson

276. Advanced Public-School Health. I, II, and SI. 2 or 3 Hrs. Preventive medicine and hygiene with particular emphasis on recent advances.
Dr. Morris

277.* Administration of Physical Education. II and SI. 2 or 3 Hrs. The

modern theories in physical education; guiding principles in the organization and administration of physical education; and the objects, content, and materials of activities in the gymnasium and on the playground. Mr. Thompson

281. **Safety Education.** II, SI, SII. 2 Hrs. A study of the modern safety education program and its place in the public school day. Various educational methods which will make for the reduction of common accidents in factories, the home, the school, the street, camps, and playgrounds will be considered. Miss Griffin

282. **Administration of Public Recreation.** I and SI. 2 Hrs. The modern concept of the public recreation program and its contribution to the leisure time problem. A special problem in organization or program will be undertaken. Mr. Webster

287. **History of Physical Education.** I and SII. 2 Hrs. The development of physical education from early civilization to the present time with particular emphasis on its relation to general education and other world movements. Miss Griffin

290. **Adaptation and Evaluation of Activities in Physical Education.** I and SII. 2 Hrs. The formulation of criteria for continuous curriculum revision in accord with educational principles and in recognition of individual needs, abilities, and interests. A special problem will be undertaken. Miss Griffin

291. **Administration of Athletics in Secondary Schools and Colleges.** SI. 2 Hrs. Administrative problems in physical education and athletics in secondary schools and colleges. A special study will be made of present practices in various types of institutions. Mr. Thompson

292. **Principles and Program of Physical Education in the Elementary Schools.** SI. 2 Hrs. Relation of physical education in the elementary schools to present-day educational philosophy and procedures will be stressed. Courses of study of outstanding city and state departments will be analyzed. A term paper dealing with program and local problems at the elementary grade level will be required. Miss Fox

293. **Organization and Administration of Intramural Sports for Men and Women.** SI. 2 Hrs. A critical analysis of intramural sports programs with a view to their justification from the standpoint of objectives and of contribution to the general welfare of the students participating.

Problems of organization and administration of programs for men and women on the secondary and college levels. A term paper of practical value will be required. Mr. Samuel

294. **Modern Trends and Principles of Physical Education.** SI. 2 Hrs. Critical analysis of current problems in the field of physical and health education and their solution in the light of sound principles. Recent trends and probable growth of responsibilities will be surveyed. Mr. Samuel

300.* **Thesis.** I, II, SI, and SII. 2 to 4 Hrs. Staff

378.* **Problems in Health and Physical Education.** I, II, SI, and SII. 2 Hrs. The solution of selected problems in health and physical education. Mr. Webster

389.* **Tests in Health and Physical Education.** II, SI, and SII. 2 Hrs. A study of anthropometric and functional tests in health and physical education. Mr. Webster

396-397-398-399.* **Seminar in Health and Physical Education.** I, II, SI, and SII. No credit. All candidates for the master's degree with a major in physical education will be required to register in this course and to attend meetings. Staff

THE SERVICE PROGRAM FOR MEN[1]

Associate Professor SAMUEL; Professor THOMPSON; Assistant Professors RODGERS, SMITH, and WEBSTER; Instructors CARNELLI, KUTZ, RAESE, and STONER

1. **Service Program for Men.**[2] I. 1 Hr. Required of all freshmen men in the University. Speedball, soccer, tennis, touch football, handball, giant volleyball, badminton, basketball. Staff

2. **Service Program for Men.** II. 1 Hr. Continuation of Course 1. Required of all freshman men in the University. Handball, basketball, softball, tennis, volleyball, track and field, indoor baseball. Staff

THE SERVICE PROGRAM FOR WOMEN[3]

Associate Professor GRIFFIN; Assistant Professor HURST;
Instructors ERLANGER and FOX

1. **Service Program for Women.** I. 1 Hr. Required of all freshman women.

   Fall season—swimming, volleyball, archery, games, dancing, badminton, tumbling.

   Winter season—clogging, folk dancing, games, swimming, basketball, tumbling. Staff

2. **Service Program for Women.** II. 1 Hr. Required of all freshman women.

   Winter season—swimming, folk dancing, games, basketball, tumbling.

   Spring season—playground baseball, archery, swimming, track and field activities, dancing, tumbling. Staff

3, 4. **Service Program for Women.** I and II. 1 Hr. per semester. Continuation of Physical Education 2. Required of all sophomore women. Staff

101, 102. **Service Program for Women.** I and II. 1 Hr. per semester. Elective for junior women. Staff

103, 104. **Service Program for Women.** I and II. 1 Hr. per semester. Elective for senior women. Staff

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[1]Physical Education 1 and 2 will meet the University requirement of 2 hours' credit in physical education as a prerequisite for graduation from all schools and colleges. During registration week, all freshmen will report at the Men's Field House for assignment of lockers and for appointments for physical examinations and physical achievement tests. These examinations and tests will be the guide in the selection of a program of physical education for the individual student. See Bulletin of the Department of Service Program for Men.

[2]Students who are found to be physically unable to engage in regular activity will be assigned to the restricted group for a restricted program of physical education recommended by the University physician and under the direction of the staff of the department. Students who pass the University physical achievement tests during the semester will be assigned to the elective group for an elective program of physical education under the direction of the staff of the department. Students who are on the freshman or Varsity athletic teams will be assigned to the athletics for credit group under the direction of the coach of the sport. Credit in Physical Education 1 and 2 earned by participation in the athletics-for-credit group will not be accepted by the State Department of Education for certification.

[3]Physical Education 1, 2, 3, and 4 will meet the University requirement of 4 hours in physical education for women, to be taken during their freshman and sophomore years.

Part IV

Degrees Conferred by The University

DEGREES CONFERRED IN 1939-40

The following is a list of degrees conferred by the University during the year 1939-40. Degrees conferred September 1, 1939, are indicated by an asterisk (*); those conferred February 1, 1940, by a double asterisk (**). All other degrees were conferred on Commencement Day, June 8, 1940.

Bachelor of Arts

Elizabeth Leonora Acker	History	Fairmont
Henry Cooke Alexander	Economics	Clarksburg
Richard Clark Anderson	Pre-Medicine	Morgantown
Betty Sue Armistead	History	Morgantown
John David Ashworth	Pre-Law	Welch
Anita Simon Baker	Political Science	Charleston
Charles Lewis Baker	Pre-Medicine	Huntington
Timothy Lawrence Barber	Pre-Medicine	Charleston
**Joe Park Beatty	Pre-Law	Mannington
**Herald Durward Bennett	Botany	Sandyville
Virginia Rose Bird	English	Princeton
Joseph Arthur Blagg	Pre-Law	Charleston
James Pierpont Bland	Psychology	Charleston
Cora Frances Board	History	Charleston
Richard Bush Bord	Pre-Law	Grafton
Marian Bowman	Economics	Clarksburg
Laura Brilliantine	Pre-Medicine	Trenton, N. J.
Charles William Brown	Pre-Medicine	Waynesburg, Pa.
Thomas A. Bunner	Pre-Law	Morgantown
Noyes Burlew Burdette	Economics	Charleston
Mary Virginia Burnside	Sociology	West Milford
*Clayton William Butcher	Botany	Thornton
Aldia Lee Cage	Latin	Martinsburg
Calvin Clay Caldwell	Economics	Dunbar
Ellsworth Ferrell Cale	Pre-Medicine	Charleston
*Chandler Campbell	History	Wheeling
Wayne Calhoon Campbell	Pre-Medicine	Chester
Joel Foster Carr	Pre-Medicine	Princeton
Emerson Roy Carson	Economics	Charleston
Harold Hardern Cashman	Pre-Medicine	Morgantown
Andres Lalata Castillo	Economics	Mangaldan, P. I.
George I. Cathers	Chemistry	Keyser
Lucius Jefferson Cavallero	Political Science	Clarksburg
Nathan Allen Cheesman	Economics	Clarksburg

Louis Patsy Cimino	Pre-Medicine	Weirton
**Catherine Calore Clifford	Sociology	Clarksburg
O. Terrell Coffield	Pre-Medicine	Morgantown
**Richard Clement Collart	French	Morgantown
Joseph Patrick Condry	History	Clarksburg
Patrick Henry Conley	Economics	Williamson
James Harold Craze	Pre-Medicine	Morgantown
Daniel Francis Cronin, Jr.	Pre-Medicine	Richwood
Secondo Dalporto	Pre-Law	Smithers
Catherine Courtney Davis	Economics	Morgantown
Del Roy Richard Davis	Pre-Medicine	Kingwood
Victoria Marie DeBiase	History	Morgantown
W. Quentin Dickens	Pre-Medicine	Levels
Elmer Helsley Dodson	Pre-Law	Charleston
James Hugo Doster	French	Wheeling
**Daniel Clay Draper	History	Morgantown
Robert Barclay Dustman, Jr.	Chemistry	Morgantown
Edward I. Eiland	Political Science	Logan
Martin Francis Fahey	Pre-Law	Wheeling
George Hugh Ferrell	Political Science	Parkersburg
Robert Joseph Fleming	Pre-Medicine	Morgantown
George H. Flowers	Political Science	Morgantown
*Salvatore V. Garofalo	French	Brooklyn, N. Y.
**Francis Joseph Gaydosh	Pre-Medicine	Wheeling
Paul Goff	Economics	Parkersburg
*Benjamin Goldberg	Pre-Medicine	Brooklyn, N. Y.
*Evelyn Goodwin	Mathematics	Cairo
*Von Walter Gordon	Economics	Parkersburg
*Robert Leslie Hale	Economics	Fairmont
**Sayle Pershing Hall	Chemistry	Clarksburg
Esther Haney	English	Morgantown
Harley F. Hardman	Chemistry	Parkersburg
Richard Dean Heironimus	Pre-Law	Davis
Susan Helmick	Psychology	Fairmont
Sylvester Doyle Helsley	Pre-Law	Ridge
Jane Hart Hill	English	Morgantown
Ernest R. Hilleary	Economics	Cameron
George Paul Hlusko	Economics	Grant Town
Norman J. Hockenbury	Economics	Harrisburg, Pa.
Carl Harold Holbert	Political Science	Fairmont
Helen Josephine Hood	Sociology	Rivesville
Winifred E. Hoyt	English	Parkersburg
*Richard Glenn Hunter	Pre-Law	Morgantown
Ruth Ann Icenhower	English	Mason
Doris Douglas Johns	Pre-Medicine	Monongah
George Franklin Johnson	Economics	Morgantown
William Henry Jones	History	Morgantown

Frances Genevieve Keefer	Chemistry	Clarksburg
**Matthew Davidson Kerr	Economics	Edgarton
*Kathryn Kimmel	Public Speaking	Morgantown
Betty Sue Kite	English.	Dorcas
Virginia Lee Koepler	History	Bluefield
Grace Helen Lamb	Economics	Lakewood, Ohio
Milton Lampell	Political Science	Paterson, N. J.
Mary Elizabeth Law	Chemistry	Morgantown
Elizabeth Boardman Lee	French	Charleston
Ferdinand Wayne Lee	Pre-Medicine	Morgantown
Elizabeth Lane Leith	English	Morgantown
Elizabeth Crow Lewin	French	Grafton
*Harry Frank Lewis, Jr.	Economics	Clarksburg
*Ralph W. Lewis	History	Morgantown
Sexton M. Linger	Geology	Buckhannon
Luceille Liston	Zoology	Clarksburg
*Frank Thomas Litton	Political Science	Charleston
*John D. Livingstone, Jr.	Economics	Clarksburg
Stanley Hamilton Livingstone	Pre-Medicine	Clarksburg
**Charles Edward Lohr	Economics	Paden City
Richard Vance Lynch, Jr.	Pre-Medicine	Clarksburg
James Norris McCabe	Economics	Charleston
Edwin Rhodes McClelland	History	Charleston
Phyllis Ruth McCoy	Latin	Stephenson
Edison Woodrow McCullough	Pre-Medicine	Saint Marys
Virginia G. McGraw	History	McGraws
**Virginia Lee McKane	Journalism	Port Richmond, N. Y.
William Paul McShane	Pre-Medicine	Morgantown
David Alderson MacQueen	English	Morgantown
Peter Mamula	Pre-Medicine	Hollidays Cove
Mary Kathryn Markle	Pre-Medicine	Confluence, Pa.
Arnold Robert Markowitz	Pre-Medicine	Clarksburg
Homer Delmar Martin	Pre-Medicine	Montrose
*Selma Marsteller Mason	Political Science	Clarksburg
William Samuel May	History	Charleston
John Mikita, Jr.	Political Science	Weirton
Betty Woodrow Moler	Sociology	Charles Town
*Vinicio Montilla	History	Santurce, P. R.
Jack Calvin Morgan	Pre-Medicine	Fairmont
John David Morris	Pre-Medicine	Morgantown
George Roy Mullins, Jr.	Pre-Medicine	Logan
**James Christopher Myers	Botany	Morgantown
James Hurley Myers	Pre-Medicine	Glen Dale
**Charles Clifford Neely	Political Science	Spencer
Harold Edward Neely	Political Science	Hinton
Marjorie Lee Nicholson	History	Welch
William Trevey Nutter	Pre-Law	Fairmont

Virginia Mae Overholt	English	Elkins
Joseph Wilbur Parker	Pre-Medicine	Fairmont
Robert A. Parrish	Pre-Law	Spencer
Jane Patterson	Sociology	Morgantown
Michael Edward Pavlich, Jr.	Pre-Medicine	Hollidays Cove
Eleanore Jeanette Pearsall	History	Morgantown
Jean Virginia Pell	Public Speaking	Morgantown
George R. Penick, Jr.	Political Science	Hurricane
Iland Dee Peters	Mathematics	Keyser
V. Victor Petitto	Public Speaking	Mount Clare
Mary Ellen Phillips	Zoology	Clarksburg
**Luella Rebecca Pollock	Mathematics	Waynesburg, Pa.
**Joseph Luke Ponka	Pre-Medicine	Morgantown
Mary Catherine Poole	French	Clarksburg
Clifton Lew Portnoff	Pre-Medicine	White Sulphur Springs
**George Winfield Post	Pre-Law	Clarksburg
Mildred Orr Posten	Sociology	Morgantown
**Melvin L. Rawe	Chemistry	New Martinsville
Carl James Roberts	Pre-Medicine	Shinnston
*Carl Wayne Robinson	Chemistry	Shinnston
Dorothy G. Robison	Sociology	Morgantown
Annie Maude Roby	English	Mount Hope
Hazlett McMillan Rodgers, Jr.	Pre-Law	Wellsburg
Margaret Rogers	Pre-Medicine	Fairmont
Robert Arnold Rogers	Pre-Medicine	Keyser
Margaret Mae Rohr	History	Charleston
Mary Rosalie Scott	Pre-Medicine	Beckley
Howard Prentiss Shores	Pre-Law	Keyser
Betty Jane Shuman	Economics	Morgantown
Edgar Camden Siegrist	Political Science	Clarksburg
Irving Leonard Silverstein	Pre-Medicine	New York, N. Y.
*Elizabeth Hammond West Smith	Journalism	Crewe, Va.
Sara Elizabeth Smith	English	Wheeling
**Margaret Gray Snedegar	History	Elkins
**Violet Cox Snedegar	English	Clarksburg
Phyllis Louise Spangler	Botany	Morgantown
Samuel Franklin Spatafore	Political Science	Clarksburg
Mary Jane Spaur	French	Grafton
Harry Adams Stansbury, Jr.	Chemistry	Morgantown
William Hugh Steed	Pre-Law	Charleston
Aloys Bernard Stenger, Jr.	Pre-Medicine	Wheeling
Norine Ann Sterling	English	Grafton
Guy Basil Stump	Chemistry	Clendenin
Bernard Lee Summers	History	Morgantown
Anna Margaret Swift	History	Moundsville
Raymond Franklin Thomasson	Pre-Medicine	Ansted
Lawrence Blair Thrush	Pre-Medicine	Moorefield

Benjamin Davis Tissue	Pre-Law	Mount Hope
**Robert Russell Trotter	Pre-Medicine	Morgantown
Harold Walter Urling	Economics	Steubenville, Ohio
Robert Louis Voigt	Chemistry	Morgantown
Bernard K. Wasserkrug	Chemistry	Oak Hill
David John Waterman, Jr.	Pre-Medicine	Wheeling
*Isaac J. Wiant	Chemistry	Lost Creek
Marjorie Ruth Wigal	English	New England
*Voorhis Frederick Wigal	Chemistry	New England
Frances Cabell Williams	Economics	Clarksburg
Jess Patsy Williams	French	Morgantown
Margaret Louise Williamson	English	Spencer
*Thomas Eber Wilson	Chemistry	Morgantown
Gabrielle Donnally Wise	English	Relay, Md.
**Ralph Daniel Witschey	Chemistry	New Martinsville
William Gerald Wolfe	Public Speaking	Huntington
**Bernard Nelson Zappin	Economics	Williamson

Bachelor of Science (Business Administration)

George W. Hopkins	Martinsburg
Marvin S. Lenett	Bluefield
Laurence Louis Liston	Clarksburg
William Rea Mucklow	Charleston
**William Mason Perry	Logan

Bachelor of Science (Chemistry)

Charles Hope Carpenter, Jr.	Grafton
Isidore Nadel	Keyser
David John Posten	Malden

Bachelor of Science

Alfred Kyle Bush A. B. Ed., Glenville State Teachers College, 1935	Glenville
Elmore Meredith Clubb A. B., West Virginia University, 1938	Clarksburg
William Ward Currence B. S., Virginia Military Institute, 1935	Clarksburg
Eugene Martin Frame A. B., New River State College, 1936	Charleston
Francis Joseph Gaydosh A. B., West Virginia University, 1940	Wheeling
Frank William Gwinn	Lowell
Charles Arthur Haislip A. B., West Virginia University, 1939	Grafton
Edgar Frank Heiskell, Jr. A. B., West Virginia University, 1938	Morgantown
Jacob Samuel Huffman A. B., Bridgewater College, 1933	Eglon
Nicholas Charrel Johns A. B., West Virginia University, 1938	Monongah
Johnsey Lee Leef	Grassy Meadows

Johnsey Lee Leef . . . . . Grassy Meadows
B. S., Marshall College, 1939

William Ord Nunnally . . . . . Wilcoe
A. B., West Virginia University, 1939

Joseph Luke Ponka . . . . . Morgantown
A. B., West Virginia University, 1940

Charles Henry Ross . . . . . Wayne
B. S. Agr., West Virginia University, 1939

George Arthur Shawkey . . . . . Charleston
A. B., West Virginia University, 1938

Thomas Malcolm Snyder . . . . . Roanoke
B. S., University of Pittsburgh, 1938

Milford Forrest Townsend . . . . . Philippi
B. S., West Virginia Wesleyan College, 1936

Robert Russell Trotter . . . . . Morgantown
A. B., West Virginia University, 1940

John Paul Young, Jr. . . . . Clarksburg
A. B., West Virginia University, 1939

Edwin Andrew Zepp . . . . . Martinsburg
A. B., West Virginia University, 1939

Bachelor of Laws

Vernon Harvey Bailey . . . . . Bluefield
A. B., West Virginia University, 1938

Wade Hampton Bronson, Jr. . . . . Williamson

James Alexander Byrum . . . . . Wheeling
A. B., West Virginia University, 1938

Edward John Carroll . . . . . Morgantown
A. B., West Virginia University, 1937

Charles Quincy Cox . . . . . Wheeling
A. B., West Virginia University, 1938

*Robert Carl DePue . . . . . Spencer
A. B., West Virginia University, 1937

Robert Earl Gocke . . . . . Morgantown
B. S., Washington and Jefferson College, 1937

Claude Elbert Goodwin . . . . . Ripley
A. B., West Virginia Wesleyan College, 1931

Robert Booth Goodwin . . . . . Ripley
A. B., West Virginia Wesleyan College, 1929

John Lynn Goshorn, Jr. . . . . Charleston
A. B., Ohio Wesleyan University, 1937

Edward H. Greene . . . . . Huntington
A. B., Marshall College, 1937

Chester Defibaugh Hart, Jr. . . . . Wheeling
A. B., West Virginia University, 1938

LeRoy Harold Katz . . . . . Bluefield
A. B., West Virginia University, 1938

Bert Ambers Kirk, Jr. . . . . Hinton
A. B., West Virginia University, 1938

Howard Charles Klebe . . . . . Wheeling
A. B., West Virginia University, 1938

Dennis Raymond Knapp . . . . . Winfield
A. B., New River State College, 1932
A. M., West Virgiina University, 1934

Velmer Kermit Knapp . . . . . Red House
A. B., New River State College, 1933

William Love Latta, Jr. . . . . Wheeling
B. S. E. E., Carnegie Institute of Technology, 1939
**Forest Lee McNeer . . . . . Hinton
A. B., Roanoke College, 1923
A. M., West Virginia University, 1934
William Joseph Moran, Jr. . . . . Parkersburg
A. B., West Virginia University, 1937
William Alexander Moreland . . . . . Morgantown
A. B., West Virginia University, 1938
Charles Clifford Neely . . . . . Spencer
A. B., West Virginia University, 1940
William Edward Neely . . . . . Fairmont
A. B., West Virginia University, 1934
Roy Andrew Peters . . . . . Bluefield
A. B., West Virginia University, 1938
Frank Anthony Pietranton . . . . . Hollidays Cove
A. B., West Virginia University, 1938
George Winfield Post . . . . . Clarksburg
A. B., West Virginia University, 1940
Morton Harry Rosenshine . . . . . Grafton
A. B., West Virginia University, 1938
Ira Mason Smith, Jr. . . . . Princeton
A. B., Roanoke College,1937
James Herbert Swadley, Jr. . . . . Keyser
A. B., West Virginia University, 1938
William Joseph Thompson . . . . . Hurricane
A. B., Marshall College, 1933
Abe Sylvan Tomchin . . . . . Princeton
A. B., West Virginia University, 1937
Winifred Ruth Tyler . . . . . Keyser
A. B., West Virginia University, 1938
Robert Ushman . . . . . Wheeling
A. B., West Virginia University, 1937
Wilson Henry Stout White, Jr. . . . . Shepherdstown
A. B. Ed., Shepherd State Teachers College, 1933

Bachelor of Science in Chemical Engineering

William Robert Armstrong . . . . . Walkersville
Sam F. Audia . . . . . Charleston
**Allen Wayne Bertschy . . . . . Wheeling
Silas Benson Birch, Jr. . . . . Wheeling
**Elmer Richard Csanady . . . . . Charleston
**Thomas David Cunningham . . . . . Morgantown
**William Harold Day . . . . . West Union
Frederick Austin Dudderar . . . . . Morgantown
John Walter Dudrow . . . . . Harpers Ferry
Robert Edwin Fleming . . . . . LeRoy
Leonard James Goodsell . . . . . Morgantown
Kendall L. Hall . . . . . Harrisville
Beverly M. Higginbotham, Jr. . . . . South Charleston
Clario Neal Jimison . . . . . Logan
Ben S. Johnson, Jr. . . . . Bluefield
Frederick William Lang . . . . . Morgantown
Robert Edward Lee . . . . . Dunbar

**Samuel Alexander McNabb	Charleston
**Harold J. Madden	Clarksburg
George G. Megrail	Morgantown
Wylie Beall Mendel	Wellsburg
**Edward Joseph Mooney	Holden
Otis Ulysses Nichols	Hiawatha
Victor Lettorine Pantalone	Farmington
**Marshall L. Previll	Malden
Charles Marcus Reed, Jr.	Martinsburg
**Walter John Ridd	Parkersburg
Aaron Rose	Morgantown
Henry Wellings Schweinsberg	Plus
**Robert Aaron Tidball	Elm Grove
**Robert L. Von Berg	Wheeling

Bachelor of Science in Civil Engineering

Isaac Paul Judy	Morgantown
**Troxell Olin Mason	Cairo
Harvey Davis Nally, Jr.	Wheeling
Ford Richardson, Jr.	Glendale, Mo.
Charles Urban Robinson	Grafton

Bachelor of Science in Electrical Engineering

**John Edward Bailey	Wheeling
Clarence Edward Carpenter	Morgantown
Roy H. Conaway	Wilbur
**Ralph Erhard, Jr.	Thomas
**Ray Earl Giboney	Tanner
George Walter Grow, Jr.	Morgantown
Melvin Harris	Laurel Creek
**Ernest Watson Hutton	Huttonsville
**Oral Justus Jones, Jr.	Fairmont
Richard Moses	Charleston
James Franklin Mynes	Huntington
Herbert Allen Pase	Thomas
James Riley Shoaf, II	Morgantown
**Robert Strother Whitescarver	Grafton
**Alfred Franklin Winter	Charleston
Donald Thompson Worrell	Pineville

Bachelor of Science in Mechanical Engineering

Emanuel Joseph Amato	Pemberton
**James Bergen Anderson	Morgantown
Carl Arthur Aronson	Davis
Paul Louis Atwell	Irwin, Pa.
Edward Post Baldwin	Morgantown
William Jameison Brown	Fairmont

**Rex Goring Buckley . . . . . Glen Ferris
Ralph Erhard, Jr. . . . . Thomas
**Anderson C. Herold, Jr. . . . . Parkersburg
Darrell E. Hornbeck . . . . . Gomoca
**Phillip Russell Nuhfer . . . . . Parkersburg
*Kenneth Eugene Pyle . . . . . Morgantown
Roy L. Queen . . . . . Huntington
A. B. Ed., Marshall College, 1937
Audra Wood Reger . . . . . Ireland
Carl J. Snyder, Jr. . . . . Roanoke
John J. Teti . . . . . Fairmont
Nicholas L. Turoff . . . . . New Cumberland
*George Alfred Umbarger . . . . . Richwood
B. S. E. E., West Virginia University, 1939
Raymond Keith Winters . . . . . Wheeling

Bachelor of Science (Engineering Electives)

CHEMICAL ENGINEERING ELECTIVES
John Lee Sullivan . . . . . Uniontown, Pa.
MECHANICAL ENGINEERING ELECTIVES
Robert Young Hayne . . . . . Charleston

Bachelor of Science in Agriculture

Ward James Ashford . . . . . Greenbank
Lawrence Farrell Bartlett . . . . . Lumberport
*Blaine Andrew Beeghly . . . . . Brandonville
Merlin Scott Bergdoll . . . . . Petersburg
Kermit Blaney . . . . . Morgantown
Denver Dayton Bragg . . . . . Clarksburg
Donald Peyton Brown . . . . . Reedsville
*Roscoe Brown, Jr., ... Jane Lew
Guy Edward Cain . . . . . Buffalo
Lawrence Stanley Cavendish . . . . . Hico
Jack Ellsworth Chalfant . . . . . Morgantown
John Cooper . . . . . Glenville
William Hubert Cox . . . . . Parsons
William Marion Coyle . . . . . Kearneysville
John Richard Dolly . . . . . Onego
Beuhring Heber Duffy . . . . . Summersville
*Merle Wayne Faulkner . . . . . Trout
Carl Rush Fisher . . . . . Gassaway
Harold Warman Fogle . . . . . Morgantown
Ralph James Goodell . . . . . Kearneysville
John William Hammer . . . . . Weston
Levi Hamlin Hampton . . . . . Kermit
*Oakley Eugene Hess . . . . . Mole Hill
*Homer Luther Ice . . . . . Enterprise

Harold Conn Jacobs . . . . . Morgantown
John Earl Klemm . . . . . Wheeling
Frank Gassaway McClung . . . . . Ronceverte
**Elmer Louis Martin . . . . . Benwood
Ralph Edgar Miller . . . . . Brandonville
Ulvert Mathew Moore . . . . . Bluefield
Robert Eugene Prettyman . . . . . Keyser
Lloyd Mason Reid . . . . . Cameron
**Paul Roger Riddle . . . . . Cairo
**Clarence Earl Riggs . . . . . Morgantown
Arthur Richard Ripley . . . . . Alma
John Lee Scranage . . . . . Grafton
John Albert Sims . . . . . Weston
David Emanuel Smith . . . . . Martinsburg
Melvin Layke Smith . . . . . Tanner
Theodore Berlin Starr . . . . . Cairo
Clarence Earl Strader . . . . . Folsom
Robert Clayton Summers . . . . . Walback
Jack Marshall Tyree . . . . . Lesage
Charley Mood Vaughan . . . . . Wayne
Joseph Franklin Watson . . . . . Dilliner, Pa.
John Raymond Webb . . . . . Morgantown
Harry Shelton Workman . . . . . Morgantown

Bachelor of Science in Home Economics

Hope Ballard . . . . . Glen Jean
Mary Boggs . . . . . Morgantown
Rebecca Ellen Carpenter . . . . . Saint Marys
Beatrice Lee Cruise . . . . . Bluefield
Martha Lee Davis . . . . . Fairmont
Mary Margaret Devore . . . . . West Union
Virginia June Dickerson . . . . . Bluefield
Lena Frances Ferrara . . . . . Morgantown
Jeane Elizabeth Fisher . . . . . Morgantown
Betty Jane Fox . . . . . Huntington
Nelle Margaret Gallaher . . . . . Morgantown
Dorothy Louise Haines . . . . . Romney
Virginia Ellen Hare . . . . . Morgantown
Mary Ellen Hickerson . . . . . Davis
Cleo Florence Holland . . . . . Sandstone
Lilyan Katherine Lawton . . . . . Iaeger
Gory Madge Light . . . . . Dothan
Frances Rebecca Mayfield . . . . . Morgantown
*Lois Byrnside Milne . . . . . Logan
Jane Nelson . . . . . Salem
Maxine Ethajune Ripley . . . . . Alma
Barbara Chalmers Smoyer . . . . . Clairton, Pa.

Ruth Rebecca Tonry	Martinsburg
*Sara Rosalind Warren	Alderson
Margaret Bachtell Waugh	Wellsburg
Margaret Ruth Weller	Charleston
**Mary Katharine Williams	Keyser
Kitty Campbell Zimmerman	Romney

Bachelor of Science in Forestry

John Dorset Earle	Clarksburg
Clifford Vernon Fisher	Harrisville
John K. Gilmer	Matoaka
Eugene James Harner	Morgantown
Ernest Frederick Hays	South Charleston
Roy Leighton Loman	Buckhannon
Harry Bland McLaughlin, Jr.	Gassaway
Eugene Dana Martin	Morgantown
Arthur Asbury Poling	Clarksburg
Alfred Emit Smith	Richwood
Philip Guy Smith	West Union
David Glenhope Sterling	Morgantown

Bachelor of Science in Education

Virginia Lee Batson	Morgantown
*Helen Foree Bell	Bluefield
Frances Bernese Bennett	Wheeling
Elizabeth Cattrell	Hollidays Cove
Charles Blaine Cobun, Jr.	Uffington
Marjorie Counselman	Wellsburg
Lucille Dodge	Terra Alta
Jacqueline Annette Eperthener	Charleston
Milton Elwood Fike	Morgantown
*William B. Fox	Talcott
Emile G. Frere	Point Marion, Pa.
Catherine Caroline Fretwell	Manheim
Violet Gadd	Charleston
*William Morgan Hale	Fairmont
*David Clyde Hodges	Morgantown
*Clara Whitten Justice	Delbarton
*Joseph Andrew Kearns	Rowlesburg
Ernest Bliss Kibbee	Morgantown
Eleanor Elizabeth Lowe	Point Pleasant
Leah Faye McVicker	Rowlesburg
James Vinson Milano	Morgantown
**Joanna Ellison Phipps	Amigo
Julia Ann Poindexter	Charleston
*M. Carolyn Rendle	Grafton
*Charlotte Rosalind Snedegar	Renick

James Carter Tabb . . . . . Kearneysville
Lois Turley . . . . . New Cumberland
Dorothy Mae Whitmore . . . . . Glen Dale
Charles Raymond Whittaker . . . . . Bluefield
Thelma Louise Wright . . . . . Morgantown

Bachelor of Science in Pharmacy

John Anthony Angotti . . . . . Shinnston
Margaret Jane Bippus . . . . . Wheeling
Dorothy Jeanne Curry . . . . . Delbarton
Clara Fay George . . . . . Littleton
Nicholas Andrew Krupey . . . . . Elkhorn
**Darris Mason Osburn . . . . . Ellamore
John Prestepove . . . . . Osage
Edgar Dale Tetrick . . . . . Shinnston

Bachelor of Music in Public-School Music

Anna Lee Davies . . . . . Morgantown
Anita Marion Dickens . . . . . Levels
Genevieve Donohoe . . . . . Charleston
*John Thomas Evans . . . . . Grafton
Frank Nelson Gaal . . . . . Morgantown
Gladys Belle Morgret . . . . . Lumberport
Sylvia Frances Sutton . . . . . Gassaway

Bachelor of Music in Violin

Evelyn Vivian Davies . . . . . Morgantown

Bachelor of Science in Engineering of Mines

**Jack W. Blair . . . . . Charleston
Donald LaRue Cornell . . . . . Parkersburg
**Michele Angelo DePietro, Jr. . . . . Holden
*Thomas Lee Griffith . . . . . Hambleton
Robert Earley Johnson . . . . . Charleston
**Richard W. Laird . . . . . Kingwood
Wendell Simpson Moore . . . . . Clarksburg
Donald Wilson Morris . . . . . Grantsville
*John Leroy Schroder . . . . . Martinsburg
**Homer W. Sharpenberg . . . . . Morgantown
*Charles William Stipe . . . . . Flemington

Bachelor of Science in Physical Education

Earl Edward Anderson . . . . . Morgantown
*Harry Stanley Baker . . . . . Lake Lynn, Pa.
Ralph Willard Bishop . . . . . Morgantown
Ermatti Lawrence Bonfili . . . . . Morgantown

Homer Brooks	Fairmont
Steve Chepko, Jr.	Mona
Thomas Leo Collins	Morgantown
Carl William Flanagan	Ridgeley
B. Eugene Haines	Romney
*Elizabeth Lee Harshbarger	Elkins
*Adelia Larew Huff	Fairmont
Genevieve Beatrice James	Clarksburg
Harry Richard Lothes	Elkins
Virginia Jean Marshall	Morgantown
Helen Frances McGuire	Huntington
Anna Margaret McKenzie	Richwood
Betty Ann McMechen	McMechen
John Lee Phares	Elkins
Samuel Pinion	Wheeling
Anthony Rapaswick	Wheeling
Cecil Gail Ryan	Morgantown
*Ronald Furman Smith	Masontown
Russell Howard Stoner	Morgantown
Diane Marie Toussaint	Clarksburg
Charles Edward Ward	Parkersburg
Emily Virginia Wilkerson	North Charleston
Harry Woodrow Wilson	Morgantown
Mary Louise Woodruff	Valley Grove
*Mary Ruth Yost	Berkeley Springs

Bachelor of Science in Journalism

George Siegfried Armstrong	Morgantown
Jeanne McCay Bailey	Morgantown
Cecil LeRoy Cutler, Jr.	Parkersburg
Jack Grenfell Dunlop	Alderson
Robert Stanley Earle	Clarksburg
Theodore Anthony Eiland	Logan
Edith Gretchen Garlow	Morgantown
Marion Gooch	Charleston
Jane Greer	Morgantown
Clyde Orilas Hess	Morgantown
Elery A. McDonald	Davis
James Robert Nuzum	Hepzibah
**William Howard Powell	Clarksburg
Alma Elizabeth White	Wadestown

Master of Arts

*Edwin Payne Adkins . . . . Education . . . . Midkiff
A. B., Berea College, 1937

*John Isaac Allman . . . . . Education . . . . Jane Lew
B. S., Agr., West Virginia University, 1917

*Harry Edwin Baer . . . . . Education . . . . South Charleston
A. B., Ed., Marshall College, 1930

*Lucy Madge Bailey . . . . . Education . . . . Salem
A. B., Salem College, 1924

*Irene Barberio . . . . . English . . . . . Morgantown
B. S. Ed., West Virginia University, 1936

*Beatrice Vivian Barnes . . . Education . . . . Morgantown
A. B., West Virginia University, 1932

Francena May Beal . . . . . English . . . . . Glenville
A. B., Morris Harvey College, 1936

Jessie Irene Bennett . . . . French . . . . . Junior
A. B., West Virginia University, 1939

*Cecil W. Billups . . . . . Education . . . . Madison
A. B., Marshall College, 1924

*Sarah Eilzabeth Bosely . . . History . . . . . Simpson
A. B., Juniata College, 1927

*James Williard Brown . . . . Education . . . . Albright
A. B., West Virginia University, 1932

*Elisha Carleton Browne . . . Education . . . . Bayard
A. B., Ed., Shepherd State Teachers College, 1936

*James B. Bruffey . . . . . Education . . . . Elkins
A. B., West Virginia University, 1925

Thomas F. Callan . . . . . English . . . . . Loretto, Pa.
A. B., St. Francis College, 1934

*Mendel M. Carp . . . . . Education . . . . Charleston
A. B., West Virginia University, 1934

*Rueben R. Carp . . . . . Education . . . . Charleston
B. S., Stout Institute, 1935

*Ercil Freeland Casseday . . . Education . . . . Terra Alta
A. B., Ashland College, 1916

*Bernard Barton Chambers . . Education . . . . Beckley
A. B., Marshall College, 1931

*Clifford Paul Clem . . . . . Education . . . . Gassaway
A. B. Ed., Glenville State Teachers College, 1933

*John Waitman Cole . . . . . English . . . . . Morgantown
A. B., West Virginia University, 1937

Shirley Cooper . . . . . Education . . . . Parsons
A. B., Davis and Elkins College, 1935

*Earl Corcoran . . . . . Education . . . . Parsons
A. B. Ed., Shepherd State Teachers College, 1937

*Edward Burdette Cordray . . . Education . . . . Morgantown
B. S. Phys. Ed., West Virginia University, 1932

Viris Wather Cromer . . . . Education . . . . Lumberport
A. B., Salem College, 1926

*Luke Crossland . . . . . Education . . . . Riverton
A. B. Ed., Shepherd State Teachers College, 1937

*Edwin Marmet Curry . . . . Political Science . . . Point Pleasant
A. B., West Virginia University, 1938

*Clifford McKinley Davis . . . Education . . . . Clarksburg
A. B., Salem College, 1923

*Charlotte White DeVault . . . Education . . . . Morgantown
A. B. Ed , Fairmont State Teachers College, 1936

*Angelo Eagon . . . . . English . . . . . Huntington
A. B., Marshall College, 1931

*Fred B. Edgell . . . . . English . . . . . Wallace
A. B., Salem College, 1931

*Quentin Evans . . . . . Education . . . . Moorefield
A. B. Ed., Shepherd State Teachers College, 1936

**Corinne Staats Fisher . . . . Sociology . . . . Ripley
A. B., Marshall College, 1936

Jean Gordon Fyfe . . . . . English . . . . . Cannelton
A. B., West Virginia University, 1939

*Clarence Leroy Games . . . . Education . . . . Moundsville
A. B., Ed., West Liberty State Teachers College, 1933

*Merton V. Givens . . . . . Education . . . . Fairmont
A. B. Ed., Fairmont State Teachers College, 1936

*Paul Cordray Glasscock . . . Education . . . . Morgantown
A. B., West Virginia University, 1934

*Anna Myers Gray . . . . . Education . . . . Glasgow
A. B., New River State College, 1935

*Clyde Lundy Gray . . . . . Education . . . . Glasgow
A. B., New River State College, 1936

*Edith Murl Hall . . . . . Education . . . . Fairmont
A. B., Ed., Fairmont State Teachers College, 1932

*Georgia Ruth Hall . . . . . Education . . . . Fairmont
A. B. Ed., Fairmont State Teachers College, 1936

*Howard Elbert Haught . . . Education . . . . Mannington
A. B. Ed., Fairmont State Teachers College, 1930

Lycurgus P. Hill . . . . . Education . . . . Morgantown
A. B., Davis and Elkins College, 1932

Margaret Houck Hinebaugh . . History . . . . . Fairmont
A. B. Ed., Fairmont State Teachers College, 1931

*Clarence Paul Hott . . . . . Education . . . . Petersburg
A. B. Ed., Fairmont State Teachers College, 1935

*Zackeria Michael Howard . . Education . . . . Charleston
A. B., West Virginia University, 1933

*Billie Burke Huddleston . . . English . . . . . Beckley
A. B., New River State College, 1935

*Hugh Hurst . . . . . Education . . . . West Union
A. B. Ed., Glenville State Teachers College, 1932

*E. Grant Hutchinson . . . . Education . . . . Morgantown
A. B., New River State College, 1933

*Haven Link Idleman . . . . Education . . . . Elk Garden
A. B., University of Kentucky, 1929

*Cordie Wilkinson Ingram . . . Education . . . . Epperly
A. B., West Virginia University, 1931

*Arthur Edward Jakeman . . . Education . . . . Norfolk, Va.
B. S., Virginia Polytechnic Institute, 1930

*Fred Merritt Johnson . . . . Education . . . . Clarksburg
A. B., Ed. Fairmont State Teachers College, 1936

*Ruth Helene Johnston . . . . Education . . . . Morgantown
A. B., West Virginia University, 1924

*William Hugh Kerr . . . . . Education . . . . Fairmont
A. B. Ed., Fairmont State Teachers College, 1936

*James Corbin Kessel . . . . Education . . . . Ripley
A. B. Ed., Marshall College, 1938

*B. Earl Kester . . . . . History . . . . . Bridgeport
A. B. Ed., Fairmont State Teachers College, 1934

*Frank Glendal Keys . . . . Education . . . . Middlebourne
A. B., West Virginia University, 1929

*Florence Louise Kimble . . . Education . . . . Hundred
A. B., West Virginia University, 1936

*John Joseph Largent . . . . Education . . . . Welch
A. B., Marshall College, 1933

*Howard Massey Leedy . . . Education . . . . War
B. S. Ed., West Virginia University, 1933

**Carter Woods Linger . . . . Education . . . . Ravenswood
P. S., West Virginia Wesleyan College, 1931

*Howard Morton Loudin . . . Education . . . . Ronceverte
A. B., Davis and Elkins College, 1924

*Leonidas K. Lovenstein . . . Education . . . . Charleston
A. B., Davis and Elkins College, 1922

*Wilbur Jacob McColloch . . . Education . . . . New Martinsville
B. S. Ed., West Virginia University, 1930

*Peter A. McCoy . . . . . Education . . . . Gary
B. S. Ed., West Virginia University, 1935

*Samuel Roy McCuskey . . . Education . . . . Wheeling
B. S., West Virginia Wesleyan College, 1936

Mary Adeline McDaniel . . . French . . . . . Morgantown
A. B., West Virginia University, 1937

*Sister M. Gertrude McParland . Education . . . . Wheeling
A. B., Mount St. Joseph College, 1932

*Edna C. McQuain . . . . . English . . . . . Troy
A. B., West Virginia University, 1929

*Asa Wyatt Maness . . . . . Education . . . . Charleston
A. B., New River State College, 1934

Mildred Ruth Mason . . . . English . . . . . Morgantown
A. B., West Virginia University, 1938

*John A. Mathias . . . . . Education . . . . Moorefield
B. S. Agr., West Virginia University, 1933

*Lilly Azel Means . . . . . Education . . . . Charleston
A. B. Ed., Glenville State Teachers College, 1935

*Nelle Snyder Melton . . . . History . . . . . South Charleston
A. B., Marshall College, 1931

*Bess Snyder Mohl . . . . . Education . . . . Sabraton
B. S. H.E., West Virginia University, 1928

*Walter Louis Moore . . . . Education . . . . Burnsville
A. B. Ed., Glenville State Teachers College, 1932

*Shirley Morton . . . . . Education . . . . Parkersburg
B. S. Ed., West Virginia University, 1936

*Virginia Lee Newby . . . . French . . . . . Montgomery
A. B., New River State College, 1931

*Lawrence Howard Nuzum . . Education . . . . Fairmont
A. B. Ed., Fairmont State Teachers College, 1934

*James Edward Powell . . . . Education . . . . Clarksburg
A. B., West Virginia University, 1935

*Anna Psalidas . . . . . English . . . . . Martinsburg
A. B. Ed., Shepherd State Teachers College, 1932

*Hadden Sherman Rhodes . . . Education . . . . Ripley
A. B. Ed., Fairmont State Teachers College, 1931

*Norris B. Richards . . . . . Education . . . . Thorpe
A. B. Ed., Concord State Teachers College,1935

*Ewart Corydon Richardson . . Education . . . . Charleston
B. S., United States Naval Academy, 1925

*Paul Wilson Ridgeway . . . Education . . . . Ridgeway
A. B. Ed., Shepherd State Teachers College, 1934

*Myrl Geraldine Rohrbough . . Education . . . . Clarksburg
A. B. Ed., Fairmont State Teachers College, 1936

*Ralph Jacob Schupbach . . . Education . . . . New Martinsville
A. B., Marshall College, 1930

*Robert Dayton Shreve . . . . Education . . . . Glenville
A. B. Ed., Glenville State Teachers College, 1938

*Herman Huber Smith . . . . English . . . . . Seth
A. B., West Virginia University, 1926

Levi Ernest Smith (Deceased) Education . . . . Morgantown
B. S. Ed., West Virginia University, 1937

*James Max Snyder . . . . . Education . . . . Morgantown
B. S. Ed., West Virginia University, 1935

*Delmar Keith Somerville . . . Education . . . . Sandyville
A. B. Ed., Glenville State Teachers College, 1936

Bonnie Frieda Starkey . . . English . . . . . Ravenswood
A. B., Denison University, 1939

*Aubrey Caperton Stowers . . Education . . . . Bluefield
A. B., Emory and Henry College, 1926

Ruth Chalfant Strosnider . . Education . . . . Blacksville
B. S., West Virginia Wesleyan College, 1932

*Dee Louise Ross Sullivan . . English . . . . . Bridgeport
A. B., University of Denver, 1925

*Hayes Rutherford Swan . . . Education . . . Confluence, Pa.
A. B., Juniata College, 1929

Irene Marguerite Taylor . . . English . . . . Keyser
A. B., Otterbein College, 1935

Mabel Ruth Taylor . . . . . Education . . . Morgantown
A. B., West Virginia University, 1929

*Eugene David Thoenen . . . Political Science . . Sistersville
A. B., West Virginia University, 1935

*Robert Keith Thompson . . . Education . . . . Athens
A. B. Ed., Concord State Teachers College, 1933

**Mary Groves Tourney . . . . History . . . . . Charleston
A. B., Duke University, 1936

**Haven Dawson Umstott . . . Economics . . . . Keyser
B. S. Ed., West Virginia University, 1937

*Iliff Porter West . . . . . Education . . . . Fort Gay
A. B., Marshall College, 1930

*James Anderson West . . . . Education . . . . Charleston
A. B., West Virginia University, 1933

*Jane Nutter West . . . . . Education . . . . Charleston
A. B., West Virginia University, 1930

*Stark Amasa Wilmoth . . . . Education . . . . Elkins
B. S. Ed., West Virginia University, 1931

*Katharine Irene Wright . . . History . . . . . Waynesburg, Pa.
B. S., Waynesburg College, 1938

*Hilary Bransford Wykle . . . Education . . . . Beckley
A. B., Lynchburg College, 1932

*Jane Yost . . . . . Education . . . . Fairmont
A. B. Ed., Fairmont State Teachers College, 1935

Master of Science

Alex G. Atty . . . . . Physical Education . Johnstown, Pa.
B. S. Phys.Ed., West Virginia University, 1939

Sarah Elizabeth Bailey . . . Zoology . . . . . Morgantown
A. B., West Virginia University, 1937

Clayton William Butcher . . . Botany . . . . . Thornton
A. B., West Virginia University, 1939

Robert Leon Carroll . . . . Mathematics . . . Fairmont
A. B. Ed., Fairmont State Teachers College, 1933

*Mary Alice Leone Coffman . . Mathematics . . . Simpson
A. B., West Virginia University, 1938

Howard C. Davis . . . . . Physical Education . Flatwoods
A. B. Ed., Shepherd State Teachers College, 1935

*Ralph G. Flowers . . . . . Chemistry . . . . Morgantown
A. B., West Virginia University, 1938

Homer Glenn Fogle . . . . . Agronomy . . . . Morgantown
B. S. Agr., West Virginia University, 1939

Lewis Hunter Gibson . . . . Physics . . . . . Huntington
A. B., Marshall College, 1935

*William Parsons Hahn . . . Physical Education . Piedmont
A. B. Ed., Shepherd State Teachers College, 1935

*James Elva Hatfield . . . . Physical Education . Burnsville
A. B. Ed., Glenville State Teachers College, 1933

*Robert Boyd Herndon . . . . Zoology . . . . . Gauley Bridge
A. B. Ed., Concord State Teachers College, 1936

Mahala May Hogue . . . . . Physical Education . Morgantown
A. B., West Virginia University, 1933

*Reginald Frederick Krause . . Zoology . . . . . Romney
A. B., West Virginia University, 1935

Grandison Templin Licklider . Chemistry . . . . Morgantown
A. B., West Virginia University, 1938

**Brooks Javins Lockhart . . . Mathematics . . . Sandyville
A. B., Marshall College, 1937

**Harvey Achiles Martin . . . Zoology . . . . . Athens
A. B. Ed., Concord State Teachers College, 1939

Ford Morrison Milam . . . . Agronomy . . . . Calvin
B. S. Agr., West Virginia University, 1938

Cora Anne Miller . . . . . Zoology . . . . . Morgantown
A. B., West Virginia University, 1939

*Harold M. Nichols . . . . . Physical Education . Colfax
A. B., Marshall College, 1928

Edward Taylor Offner . . . . Zoology . . . . . Fairmont
A. B. Ed., Fairmont State Teachers College, 1929

**J. Lloyd Poland . . . . . Zoology . . . . . Martinsburg
A. B., West Virginia University, 1939

*Dorothy Love Pollock . . . . Chemistry . . . . Waynesburg, Pa.
A. B., West Virginia University, 1938

*Ila Mae Propps . . . . . Physical Education . Fayetteville
A. B., Berea College, 1931

Dexter Nevins Putnam . . . Dairy Husbandry . Wilton, N. H.
B. S., University of New Hampshire, 1938

Rex Ellwood Pyles . . . . . Physical Education . Philippi
A. B. Ed., Glenville State Teachers College, 1934

**Crosby Underwood Rogers . . Chemistry . . . . Salem
B. S., Salem College, 1937

Richard H. Ross . . . . . Dairy Husbandry . Centre Hall, Pa.
B. S., Pennsylvania State College, 1938

Thomas Doyle Runnels . . . Animal Husbandry . Claremore, Okla.
B. S., Oklahoma A. & M. College, 1936

Frank Willard Schaller . . . Agronomy . . . . Onalaska, Wis.
B. S. Agr., University of Wisconsin, 1937

*Olyn Wayne Shannon. . . . Chemistry . . . . Richmond, Va.
B. S., University of Richmond, 1937

*Roland Paul Sharp . . . . . Zoology . . . . . Frost
A. B. Ed., Concord State Teachers College, 1936

Benjamin F. Tatterson . . . Chemistry . . . . Reedy
A. B. Ed., Glenville State Teachers College, 1936

Hugh Alexander Turnbull, Jr. . Physics . . . . . Rahway, N. J.
B. S., Lafayette College, 1938

**Lucy Ellen Vandervort . . . Chemistry . . . . Morgantown
A. B., West Virginia University, 1937

Elmer Wade Van Gilder . . . Zoology . . . . . Philippi

Howard Henry Woeber . . . Chemistry . . . . Charleston
A. B., West Virginia University, 1938

Frank Earl Woltz, Jr. . . . . Chemistry . . . . Elyria, Ohio
B. S., Bethany College, 1938

Master of Science in Chemical Engineering

Edward Frank Eckert . . . . . Morgantown
B. S. Ch. E., West Virginia University, 1939

*James Chapman Goodwin . . . . . Bridgeport
B. S. Ch. E., West Virginia University, 1938

John William McFarland, Jr. . . . . Grafton
B. S. Ch. E., West Virginia University, 1938

**John Homer Holt Nuzum . . . . . Grafton
B. S. Ch. E., West Virginia University, 1939

John William Phelps . . . . . Webster Springs
B. S. Ch. E., West Virginia University, 1938

**Harold Conrad Pratt . . . . . Pine Grove
B. S. Ch. E., West Virginia University, 1938

**Edward Corban Tabler . . . . . Mannington
B. S. Ch. E., West Virginia University, 1938

*Sterling Noyes Vines . . . . . Hinton
B. S., (Eng'g. Electives), West Virginia University, 1938
B. S. Ch. E., West Virginia University, 1938

Electrical Engineer

William Darlington Hall . . . . . Elkins
B. S. E. E., West Virginia University, 1934
M. S. E. E., West Virginia University, 1935

Engineer of Mines

G. Ralph Spindler . . . . . Morgantown
B. S. E. M., West Virginia University, 1932

Professional Certificate in Social Administration

Helen Steele Ellison . . . . . Alderson
A. B., Marshall College, 1936

Virginia Mae Miller . . . . . Woodlands
A. B. Ed., West Liberty State Teachers College, 1937

Maxine June Nach . . . . . Hollidays Cove
A. B., West Virginia University, 1938

Albert Edward Rhudy . . . . . Bluefield
A. B., West Virginia University, 1939

Maybelle Annie Shute . . . . . Huntington
A. B., Marshall College, 1932

Merrill Lyndall Shutts . . . . . Vienna
A. B., Marietta College, 1937

Beatrice Werble . . . . . Fairmont
A. B., West Virginia University, 1939

Doctor of Philosophy

Allen Byron Cunningham . . . Mathematics . . . Fairmont
A. B. Ed., Fairmont State Teachers College, 1934
M. S., West Virginia University, 1936
Dissertation: Non-Involutorial Space Transformations Associated with a Q1, 2 Congruence.

Donald E. Hoffmaster . . . . Plant Pathology . . Edinburg, Pa.
B. S. Ed., Kent State University, 1932
Dissertation: A Study of Pathogenic Races of **Fusarium bulbigenum** v. **niveum.**

Roger Nathaniel LeFevre . . Plant Pathology . . Newport News, Va.
B. S., Virginia Polytechnic Institute, 1918
M. S., West Virginia University, 1935
Dissertation: A Study of the Parasitism of **Fusarium bulbigenum** var. **niveum** on Watermelons and Muskmelons.

*Peter Joseph Zuchero . . . . Zoology . . . . . Montgomery
A. B., West Virginia University, 1929
M. S., West Virginia University, 1933
Dissertation: Notes on the Life History of **Capillaria annulata.**

HONORARY DEGREES

Doctor of Laws

Michael Late Benedum . . . . . Pittsburgh, Pa.
Philip Melanchton Snyder . . . . . Mount Hope
William Roote Thompson . . . . . Mitchell, Va.

Doctor of Science

Harold Earl Thompson . . . . . Rye, N. Y.
E. E., University of Illinois, 1914

DEGREES CONFERRED 1870-1940

Bachelor's Degrees

YEAR	A. B.	B. S.	LL. B.	B. S. C. E.	B. S. M. E.	B. S. E. M.	B. S. E. E.	B. S. Ch. E.	B. S. Ind. Ed.	B. S. Agr.	A. B. in Law	Ph. B.	M. D.	D. V.	B. S. H. E.	Ph. C.	Ph. G.	B. Mus.	B. S. Ed.	B. S. Phys. Ed.	B. S. Phar	B. S. For.	B. S. Journ.	Totals
1870..	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
1871..	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2
1872..	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4
1873..	7	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	13
1874..	7	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	7
1875..	6	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	7
1876..	3	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	9
1877..	7	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	9
1878..	5	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	6
1879..	2	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4
1880..	2	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	6
1881..	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3
1882..	7	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	10
1883..	9	3	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	17
1884..	3	1	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	9
1885..	4	3	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	13
1886..	5	1	7	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	13
1887..	2	1	8	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	11
1888..	4	....	9	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	13
1889..	9	3	7	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	19
1890..	6	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	12
1891..	8	4	14	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	26
1892..	6	2	18	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	30
1893..	12	2	11	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	30
1894..	8	2	23	5	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	39
1895..	10	4	24	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	41
1896..	8	3	35	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	48
1897..	11	2	44	2	2	....	....	....	....	....	5	....	....	....	....	....	....	....	....	....	....	....	....	66
1898..	9	5	18	6	....	....	....	....	....	1	5	1	....	....	....	....	....	....	....	....	....	....	....	45
1899..	12	2	40	7	1	....	....	....	....	2	....	2	....	....	....	....	....	....	....	....	....	....	....	66
1900..	46	1	9	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	58
1901..	30	....	9	3	....	....	....	....	....	1	2	....	....	....	....	....	....	....	....	....	....	....	....	45
1902..	25	....	17	8	2	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	54
1903..	29	1	10	6	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	48
1904..	28	....	8	2	2	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	42
1905..	20	2	22	4	3	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	53
1906..	18	1	17	9	6	....	....	....	....	1	....	....	3	....	....	....	....	....	....	....	....	....	....	55
1907..	32	3	12	14	4	....	....	....	....	2	....	....	8	....	....	....	....	....	....	....	....	....	....	75
1908..	20	4	8	6	6	....	....	....	....	....	....	....	7	....	....	....	....	....	....	....	....	....	....	51
1909..	27	3	2	15	4	....	....	....	....	1	....	....	4	....	....	....	....	....	....	....	....	....	....	56
1910..	27	6	12	7	5	....	....	....	....	....	....	....	1	2	....	....	....	....	....	....	....	....	....	60
1911..	27	5	12	6	7	2	....	....	....	3	....	....	4	2	....	....	....	....	....	....	....	....	....	68
1912..	27	12	17	9	9	....	....	....	....	4	....	....	6	....	....	....	....	....	....	....	....	....	....	84
1913..	28	9	15	3	1	....	2	....	....	3	....	....	....	....	....	....	....	....	....	....	....	....	....	61
1914..	28	13	12	4	1	....	5	....	....	12	....	....	1	....	....	....	....	....	....	....	....	....	....	76
1915..	35	25	14	8	4	1	5	....	....	10	....	....	....	....	....	....	....	....	....	....	....	....	....	102
1916..	40	8	9	2	4	1	6	....	....	10	....	....	....	....	....	....	....	....	....	....	....	....	....	80
1917..	62	9	16	5	2	5	....	....	....	19	....	....	....	....	1	....	1	....	....	....	1	....	....	121
1918..	40	8	5	4	4	1	4	....	....	17	....	....	....	....	2	....	....	....	....	....	....	....	....	85
1919..	42	11	2	....	1	2	3	....	....	5	....	....	....	....	10	....	....	....	....	....	....	....	....	76
1920..	79	22	16	11	2	....	5	....	....	14	....	....	....	....	17	....	1	....	....	....	2	....	....	169
1921..	93	29	12	7	5	5	7	2	1	25	....	....	....	....	9	....	3	....	....	....	1	....	....	199
1922..	56	48	17	7	5	7	6	3	....	18	....	....	....	....	17	....	10	....	....	....	....	....	....	194
1923..	125	47	20	4	8	9	9	4	....	41	....	....	....	....	19	....	8	....	....	....	....	....	....	294
1924..	130	43	18	9	8	2	18	7	1	25	....	....	....	....	25	....	11	....	....	....	1	....	....	298
1925..	132	53	26	14	3	6	17	6	....	19	....	....	....	....	25	....	6	....	....	....	....	....	....	307
1926..	169	58	26	19	5	11	9	4	1	22	....	....	....	....	19	....	5	1	....	....	2	....	....	351
1927..	198	55	37	13	7	10	15	7	....	14	....	....	....	....	32	....	1	1	....	....	4	....	....	394
1928..	211	48	35	7	3	7	17	4	....	15	....	....	....	....	28	5	....	....	....	....	3	....	....	383
1929..	230	49	42	8	7	3	15	5	....	21	....	....	....	....	31	13	....	3	2	....	....	....	....	430
1930..	264	42	42	7	2	3	24	9	....	22	....	....	....	....	22	10	....	10	23	1	1	....	....	482
1931..	252	42	40	9	4	2	21	7	3	23	....	....	....	....	25	5	....	12	37	6	3	....	....	491
1932..	209	54	42	11	7	5	17	6	3	24	....	....	....	....	39	4	....	14	25	17	2	....	....	479
1933..	233	52	45	8	7	4	13	12	5	24	....	....	....	....	33	5	....	8	28	21	1	....	....	499
1934..	216	48	32	5	5	4	16	10	5	18	....	....	....	....	31	3	....	....	19	26	1	....	....	439
1935..	202	54	29	7	9	....	20	14	2	21	....	....	....	....	40	....	....	....	34	22	1	....	....	455
1936..	214	43	44	13	8	7	13	26	3	25	....	....	....	....	32	1	....	6	37	25	6	....	....	503
1937..	239	23	30	6	5	1	11	21	2	24	....	....	....	....	39	....	....	4	52	14	2	....	....	473
1938..	249	17	37	7	10	4	15	19	....	17	....	....	....	....	36	....	....	13	49	20	7	....	....	500
1939..	230	24	35	7	5	5	18	21	1	33	....	....	....	....	33	....	....	15	37	33	11	11	....	519
1940..	192	30	34	5	19	11	16	31	....	47	....	....	....	....	28	....	....	8	30	29	8	12	14	514
Totals	4735	1062	1171	331	204	118	327	219	27	593	13	3	34	4	593	46	46	95	373	214	57	23	14	10302

Master's Degrees

YEAR	A. M.	M. S.	LL. M.	M. S. Agr.	M. S. C. E.	M. S. M. E.	M. S. Ch. E.	M. S. E. M.	M. S. E. E.	Totals
1873	1									1
1874	2									2
1875	4									4
1876	7	5								12
1877	2									2
1878	12									12
1879	3	5								8
1880	7	2								9
1881	5									5
1882	2	1								3
1883	3	2								5
1884	3									3
1885	3									3
1886	9	3								12
1887	3	3								6
1888	5	4								9
1889	4									4
1890	1	1								2
1891	2									2
1892										
1893										
1894	1									1
1895										
1896	1									1
1897	1									1
1898			1							1
1899	3									3
1900	4									4
1901	3									3
1902	4	1								5
1903	4									4
1904	4		2							6
1905	2									2
1906	2									2
1907										
1908	1		2							3
1909	6									6
1910	2		1							3
1911	3									3
1912	1		1							2
1913	2		2							4
1914	1									1
1915	2	1	1							4
1916	5			1						6
1917	5									5
1918	1	2		1	1					5
1919										
1920	4	2								6
1921	5	2								7
1922	11	2								13
1923	13	1				1				15
1924	15	2		2			1			20
1925	14	3		3	2					22
1926	21	3		6			2			32
1927	27	1		5		1	1	1		36
1928	30	3		5			1	2		41
1929	36	5		3			1			45
1930	64	4		7				1		76
1931	39	29			1	1	2			72
1932	33	29			2			1	1	66
1933	46	19			3		2	1	2	73
1934	51	24					1			76
1935	62	23					4		2	91
1936	65	20			1		1			87
1937	76	19					2			97
1938	94	24								118
1939	119	22			1		1		1	144
1940	110	38					8			156
Totals	1071	305	10	33	11	3	27	6	6	1472

Doctor's Degrees

	Doctor of Philosophy
1902	1
1907	1
1932	6
1933	5
1934	3
1935	10
1936	4
1937	2
1938	2
1939	3
1940	4
TOTAL	41

Honorary Degrees

YEAR	Doctor of Philosophy	Doctor of Divinity	Doctor of Laws	Doctor of Literature	Doctor of Civil Laws	Civil Engineer	Mech. Engineer	Elect. Engineer	Doctor of Science	Chem. Engineer	Engineer of Mines	TOTALS
1875	1											1
1883		2	1									3
1885			1									1
1886			3									3
1887		1										1
1888	1	1	2									4
1889	1	2	1			3						7
1890	2		1									3
1891	1	4	1									6
1892	1	2	1									4
1893			1									1
1894	3	3		1								7
1896	1	1	1									3
1897			1		1	1						3
1898						1						1
1909							1	2				3
1915						3						3
1918						1						1
1919			15		2							17
1920						1						1
1921			1				1					2
1924						1		1				2
1928			1				1					2
1929			3				1					4
1930								1				1
1932			2			1						3
1933			2			1	1					4
1934			1							1		2
1935												
1936												
1937			1				1					2
1938			1			1		2	1			5
1939			1	1								2
1940			3					1	1		1	6
TOTAL	11	16	45	2	3	14	6	7	2	1	1	108

THE CLASSIFIED ENROLLMENT, 1940-41

In the Colleges and Schools

A. The Summer Sesson, 1940

	Senior			Junior			Sophomore			Freshman			Total			Special			Grand Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Tota	Men	Women	Total	Men	Women	Total	Men	Women	Total
Agr., For., and H. E.	20	21	41	23	12	35	12	6	18	8	3	11	63	42	105	4	1	5	67	43	110
Arts and Sciences	49	22	71	40	16	56	28	15	43	8	6	14	125	59	184	12	24	36	137	83	220
Education	9	11	20	4	14	18	.....	.....	.....	1	.....	1	14	25	39	10	16	26	24	41	65
Engineering	10	.....	10	24	.....	24	30	.....	30	19	.....	19	83	.....	83	.....	.....	.....	83	.....	83
Graduate	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	327	227	554	81	35	116	408	262	670
Journalism	.....	2	2	1	1	2	.....	.....	.....	.....	.....	.....	1	3	4	.....	.....	.....	1	3	4
Mines	2	.....	2	4	.....	4	4	.....	4	1	.....	1	11	.....	11	.....	.....	.....	11	.....	11
Music	3	9	12	1	6	7	1	1	2	.....	1	1	5	17	22	.....	6	6	5	23	28
Pharmacy	2	.....	2	1	.....	1	1	1	2	2	.....	2	6	1	7	.....	.....	.....	6	1	7
Phys. Ed. and Athletics	1	8	9	1	3	4	1	1	2	4	2	6	7	14	21	.....	.....	.....	7	14	21
Summer Session Special	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73	44	117	73	44	117
Total	96	73	169	99	52	151	77	24	101	43	12	55	642	388	1,030	180	126	306	822	514	1,336

B. The First Semester (September to January), 1940-41

Agr., For., and H. E.	63	43	106	80	48	128	77	72	149	82	63	145	302	226	528	7	4	11	309	230	539
Arts and Sciences	143	62	205	101	67	168	271	133	404	365	177	542	880	439	1,319	17	12	29	897	451	1,348
Education	14	34	48	8	20	28	.....	.....	.....	.....	.....	.....	22	54	76	5	15	20	27	69	96
Engineering	173	1	174	109	1	110	125	.....	125	152	1	153	559	3	562	.....	.....	.....	559	3	562
Graduate	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	130	69	199	16	3	19	146	72	218
Journalism	10	9	19	8	9	17	.....	.....	.....	.....	.....	.....	18	18	36	.....	.....	.....	18	18	36
Law	29	1	30	37	1	38	53	5	58	.....	.....	.....	119	7	126	3	.....	3	122	7	129
Medicine	19	.....	19	25	2	27	.....	.....	.....	.....	.....	.....	44	2	46	.....	.....	.....	44	2	46
Mines	9	.....	9	9	.....	9	19	.....	19	13	.....	13	50	.....	50	.....	.....	.....	50	.....	50
Music	6	7	13	4	13	17	10	18	28	8	16	24	28	54	82	3	2	5	31	56	87
Pharmacy	8	.....	8	18	1	19	14	2	16	21	1	22	61	4	65	.....	.....	.....	61	4	65
Phys. Ed. and Athletics	—t 5	13	28	9	9	18	13	14	27	19	17	36	56	53	109	1	.....	1	57	53	110
Total	489	170	659	408	171	579	582	244	826	660	275	935	2,269	929	3,198	52	36	88	2,321	965	3,286

C. The Second Semester (February to June), 1940-41

	Senior			Junior			Sophomore			Freshman			Total			Special			Grand Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Agr., For., and H. E.	49	37	86	79	48	127	73	67	140	70	60	130	271	212	483	5	3	8	276	215	491
Arts and Sciences	123	54	177	192	71	263	248	121	369	317	166	483	880	412	1,292	19	15	34	899	427	1,326
Education	12	30	42	12	25	37	.....	.....	.....	.....	.....	.....	24	55	79	6	6	12	30	61	91
Engineering	60	1	61	98	1	99	105	.....	105	163	2	165	426	4	430	1	.....	1	427	4	431
Graduate	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	127	71	198	11	7	18	138	78	216
Journalism	10	8	18	8	10	18	.....	.....	.....	.....	.....	.....	18	18	36	.....	.....	.....	18	18	36
Law	25	1	26	30	1	31	45	5	50	.....	.....	.....	100	7	107	3	.....	3	103	7	110
Medicine	18	.....	18	22	1	23	.....	.....	.....	.....	.....	.....	40	1	41	.....	.....	.....	40	1	41
Mines	5	.....	5	10	.....	10	20	.....	20	13	.....	13	48	.....	48	.....	.....	.....	48	.....	48
Music	4	6	10	5	12	17	6	18	24	6	15	21	21	51	72	2	2	4	23	53	76
Pharmacy	5	.....	5	18	1	19	14	2	16	18	.....	18	55	3	58	.....	.....	.....	55	3	58
Phys. Ed. and Athletics	15	14	29	7	10	17	12	11	23	15	16	31	49	51	100	1	.....	1	50	51	101
Total	326	151	477	481	180	661	523	224	747	602	259	861	2,059	885	2,944	48	33	81	2,107	918	3,025

D. The Academic Year (September to June), 1940-41

Agr., For., and H. E.	65	43	108	85	50	135	82	74	156	84	67	151	316	234	550	8	6	14	324	240	564
Arts and Sciences	145	64	209	109	68	177	284	136	420	377	186	563	915	454	1,369	22	19	41	937	473	1,410
Education	15	35	50	9	22	31	.....	.....	.....	.....	.....	.....	24	57	81	9	16	25	33	73	106
Engineering	173	1	174	110	1	111	129	.....	129	164	1	165	576	3	579	1	.....	1	577	3	580
Graduate	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	168	85	253	17	10	27	185	95	280
Journalism	10	9	19	8	9	17	.....	.....	.....	.....	.....	.....	18	18	36	.....	.....	.....	18	18	36
Law	29	1	30	38	1	39	54	5	59	.....	.....	.....	121	7	128	3	.....	3	124	7	131
Medicine	19	.....	19	25	2	27	.....	.....	.....	.....	.....	.....	44	2	46	.....	.....	.....	44	2	46
Mines	9	.....	9	10	.....	10	19	.....	19	14	.....	14	52	.....	52	.....	.....	.....	52	.....	52
Music	6	7	13	4	13	17	10	18	28	8	17	25	28	55	83	4	2	6	32	57	89
Pharmacy	8	.....	8	18	1	19	15	2	17	21	1	22	62	4	66	.....	.....	.....	62	4	66
Phys. Ed. and Athletics	16	14	30	9	9	18	13	16	29	19	17	36	57	56	113	1	.....	1	58	56	114
Total	495	174	669	425	176	601	606	251	857	687	289	976	2,381	975	3,356	65	53	118	2,446	1028	3,474

E. The Summary for 1940-41

	Senior			Junior			Sophomore			Freshman			Total			Special			Grand Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Agr., For., and H. E.	71	52	123	91	54	145	82	77	159	86	67	153	330	250	580	11	7	18	341	257	598
Arts and Sciences	168	73	241	213	73	286	286	138	424	378	188	566	1,045	472	1,517	32	39	71	1,077	511	1,588
Education	20	41	61	11	32	43	.....	.....	.....	.....	.....	.....	31	73	104	18	29	47	49	102	151
Engineering	77	1	78	111	1	112	132	.....	132	171	1	172	491	3	494	.....	.....	.....	491	3	494
Graduate	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	437	282	719	99	41	140	536	323	859
Journalism	10	9	19	8	9	17	.....	.....	.....	.....	.....	.....	18	18	36	.....	.....	.....	18	18	36
Law	29	1	30	37	1	38	55	5	60	.....	.....	.....	121	7	128	3	.....	3	124	7	131
Medicine	19	.....	19	25	2	27	.....	.....	.....	.....	.....	.....	44	2	46	.....	.....	.....	44	2	46
Mines	10	.....	10	10	.....	10	19	.....	19	15	.....	15	54	.....	54	.....	.....	.....	54	.....	54
Music	8	12	20	5	17	22	10	19	29	8	16	24	31	64	95	5	7	12	36	71	107
Pharmacy	8	.....	8	18	1	19	15	2	17	21	1	22	62	4	66	.....	.....	.....	62	4	66
Phys. Ed. and Athletics	17	21	38	9	10	19	14	16	30	19	19	38	59	66	125	1	.....	1	60	66	126
Summer Session Special	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70	43	113	70	43	113
Total	437	210	647	538	200	738	613	257	870	698	292	990	2,723	1,241	3,964	239	166	405	2,962	1,407	4,369

SHORT COURSES AT MORGANTOWN:			
Coal Conference	225	.....	225
Coal Mining	136	.....	136
Farm and Home Week	299	289	588
Fire School	165	.....	165
Gas Measurement	446	.....	446
Junior Farmers' Week	659	.....	659
Music Clinic (Non-Credit Group)	.....	3	3
National Defense Classes	330	.....	330
Physical Education Coaching School (Non-Credit Group)	102	.....	102
Water Purification	12	.....	12
Welding School	140	.....	140
Wiring and Lighting Conference	125	.....	125
Total Enrollment at Morgantown	5,601	1,699	7,300
Mining and Industrial Extension	3,243	.....	3,243
United States Engineering Defense Training	1,758	.....	1,758
Water Conference	150	.....	150
University Graduate Extension	31	48	79
Grand Total	10,783	1,747	12,530

THE GEOGRAPHICAL DISTRIBUTION OF ENROLLMENT

In the Colleges and Schools

By States and Foreign Countries

Arkansas	1	New Jersey	23
Colorado	1	New York	38
Connecticut	3	Ohio	23
District of Columbia	1	Oklahoma	1
Florida	3	Pennsylvania	190
Hawaii	1	Puerto Rico	22
Illinois	4	Rhode Island	2
Indiana	1	South Carolina	1
Iowa	2	South Dakota	1
Kentucky	2	Tennessee	5
Maryland	20	Texas	1
Massachusetts	5	Vermont	2
Minnesota	1	Virginia	8
Mississippi	3	West Virginia	3999
Missouri	1	Wisconsin	2
Nebraska	1		
New Hampshire	1	TOTAL	4369

By West Virginia Counties

Barbour	23	Mingo	42
Berkeley	47	Monongalia	818
Boone	22	Monroe	18
Braxton	40	Morgan	21
Brooke	38	Nicholas	43
Cabell	47	Ohio	188
Calhoun	15	Pendleton	28
Clay	15	Pleasants	17
Doddridge	21	Pocahontas	30
Fayette	87	Preston	149
Gilmer	26	Putnam	11
Grant	24	Raleigh	76
Greenbrier	87	Randolph	58
Hampshire	18	Ritchie	52
Hancock	92	Roane	47
Hardy	12	Summers	28
Harrison	297	Taylor	63
Jackson	27	Tucker	54
Jefferson	31	Tyler	28
Kanawha	356	Upshur	38
Lewis	45	Wayne	18
Lincoln	6	Webster	15
Logan	36	Wetzel	60
McDowell	70	Wirt	13
Marion	236	Wood	106
Marshall	81	Wyoming	17
Mason	17		
Mercer	89		
Mineral	56	TOTAL	3999

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